THE

# MACDONALD COLLEGE MAGAZINE.

*"Mastery for Service."*

**Published by the Students.**

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## MAGAZINE STAFF.



# *EDITORIAL.*

One never realizes his inability to perform any work until he is brought face to face with what *must* be done by *him.* At present nothing seems as difficult as the task before us—that of writing our first editorial. We can only hope that our readers will reserve their criticism not only on this task but on the MAGAZINE as a whole until at least another number has appeared.

We do not mean to apologize for our issue, for that would do no good. What we would like to do is to state a few facts concerning the present state of affairs. On account of the extremely unbalanced state of business we have been forced to reduce, where at all possible, the cost of our MAGAZINE. It is a well-worn statement that advertisements run a paper. We scarcely need

say that advertisements are very hard to obtain this year, and, consequently, we must feel our way for a time. A great many periodicals, more safely situated than a College Magazine can be, have ceased publication until conditions improve, so that some idea as to the state of affairs may be formed. We must say that our advertisers have stood by us nobly. In return for this we would make a special appeal to our readers, whenever possible, to avail themselves of the opportunity of dealing with these firms. We are prepared to heartily endorse any and all of the advertisements in our MAGAZINE, and we feel sure that good for all concerned will come if our appeal is answered. We know by experience that considerable business is done with a great many of the companies who advertise in our columns, but they do not realize where the knowledge of their merits was obtained. Therefore we would ask you, our subscribers, to kindly mention the MACDONALD COLLEGE MAGAZINE when dealing with our advertisers.

The fact that we felt we must reduce the cost of the MAGAZINE until our way was clear was not so disturbing as *how* we were to reduce the cost. This not only made us reduce the number of illustrations but made us undecided for a time as to what type and style of article would best suit our circumstances. It was a case of undergraduate vs. alumni articles, and we decided, wherever possible, in favour of the undergraduate. We feel more satisfied with ourselves for this when we see that one of our exchanges in its comment on our MAGAZINE says, "The plan of the MAGAZINE is extensive, but the subject matter does not appear to be that which would appeal to the average undergraduate." We know that it was the aim of the retiring editor to fill his column with student articles. We wish to continue in this, because we believe that articles written by the undergraduate must be interesting to the undergraduate.

It is only by each one doing his best that we can hope for success in this departure. The editorial board is, in a large measure, the instrument of the students. It is simply the medium through which the current thought is expressed, and by means of it the scholarship to which we have attained is made known to the interested outsider. We would then ask for the sincere and lasting co-operation of our fellow-students; in return we promise to try our very best to make our work a success.

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Perhaps it is because we have been in the "mill" about one month now that we can appreciate the efforts *and* successes of the retiring Magazine Board. While they were in office we noticed the improvements made by them but we appreciated them just as much as the casual reader would. Consequently we have the double advantage of first of all seeing how their successes appear to the outsider, and secondly, of realizing just how much effort was necessary to assure the success obtained.

On account of the college closing early in December, 1913, the then new board was unable to receive the customary advice from their forerunners. Despite this handicap the first issue of the MAGAZINE compared well indeed with the issues of any other board. However it was after this that the new board found itself. Then followed what must be called a revolution of affairs in the Magazine office. In order to put things on a safe basis financially and increase the circulation, a popularity contest was instigated, and proved a decided

success. Through the interest aroused by their determined efforts, the circulation of the MAGAZINE was greatly enlarged by the help of the college authorities.

Not only did the energies of the board become evident in outside matters so far referred to, but the columns of the paper began to breathe of the enthusiasm and originality of the leaders. As we have said before, this was probably not noticed by the casual reader, but with the first number of the MAGAZINE in the present term that originality showed itself so plainly that even the most diffident must have realized it. We refer now to the new cover which called forth so many commendations, that the originators must have felt repaid for their sleepless nights.

Truly, we know that, having summarized the truth about our predecessors, we have made our own position so much more difficult to fill, but it was only what was due them. Could we dare to hope such career for ourselves we would look forward to the same treatment.

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Every one must know that the quality of the illustrations in a magazine like ours does as much towards making it a success as any other one phase of the publication. It is impossible for the editorial board to obtain the pictures they desire. What are needed are pictures typical of life or nature as seen by some of our subscribers.

An illustration must be of a very high order to exert an influence on a person through its natural scenery alone. There must be something which appears to present or bygone days in the life of the observer or to his ideal future. From the ranks of our subscribers only can we hope to procure such scenes, and we would appreciate an effort along this line very much.

From certain sources the prompting came to institute a contest, offering a prize in money for the best collection of photos. Even if we were on a better basis financially we would deem it unnecessary to offer such an inducement. Among our now large alumni, there must be a score of expert photographers, and the knowledge that they have the sincere thanks of the editorial board will be ample payment for any trouble they may put themselves to. For those who are subscribers or friends of subscribers, but not alumni, we offer a prize of two years' subscription to our MAGAZINE to the one sending in the three best photos. These will be judged for, first of all, their scenery and attractiveness; then the quality and tone of the prints will be considered. The group of photos winning first place will be published in our spring number. A second prize of one year's subscription will be given to the second best group of photos. We sincerely hope that our alumni will see this in the right light, and that we shall have contributions from them for this competition. As we have mentioned above, we do not offer them any inducement beyond the aiding of the College Magazine, because we think it is not needed. We can say no more than this. Do respond !


# *Types of Barley and their Adaptability for Quebec.*

*By C. H. Hodge, B.S.A., Macdonald College.*

THE original type from which our cultivated varieties of barley have been produced is the source of considerable difference of opinion among botanists. Many believe that they all originated from a wild six-rowed form, basing their belief on the fact that all the ancient references to barley are to those of the six-rowed type. Others, again, think that a wild two-rowed type, found growing on the barren hill-sides of Palestine, is the true source.

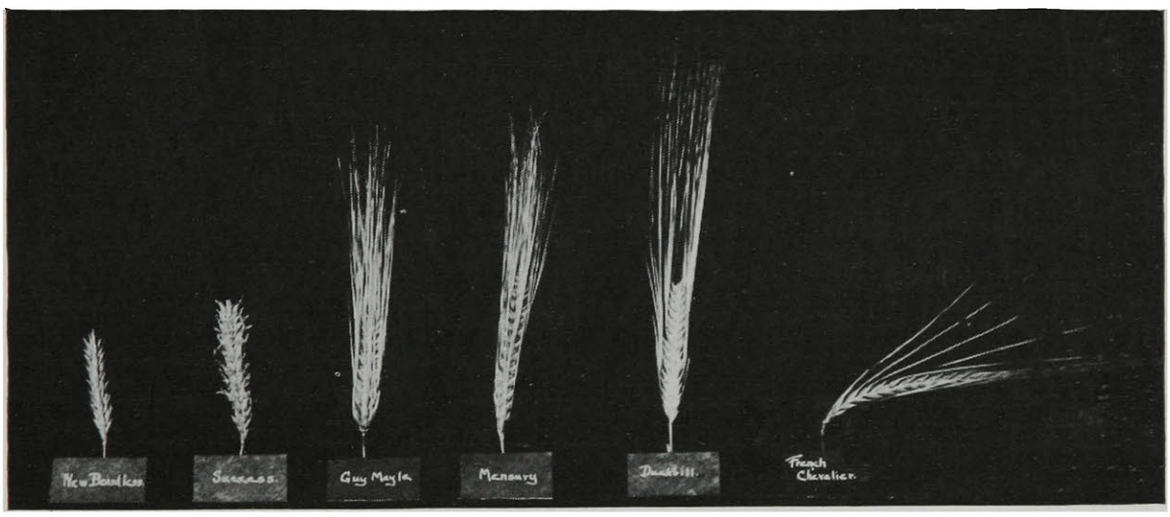
That both types had a common origin is evident from the fact that in the two-rowed type there are two rows of rudimentary flowers on each side of the two rows of grains. Whether the six-rowed type is an improvement from the two-rowed, or the two-rowed type a degeneration from the six-rowed, is a question for the botanists to decide. We know, however, that both types existed in the very early history of man and have formed the foundation upon which all improvement work in barley has been based.

Probably the first change that occurred in barley was the separation of the two-rowed barley into an erect and compact-headed type and an open nodding-headed type. This separation took place at a comparatively early date, and whether it was the result of accident or of human agency does not appear to be known. From then on very little change was made, except for the selection of a few improved varieties, until recent years, when breeders first turned their attention toward breeding a barley that was free from awns. In this they were successful in so far that they replaced the awn with a hood-shaped appendage from which arose the name of hooded barley. About the same time that the hooded barley was produced, a barley was

originated which threshed out free from the glumes, like wheat, and was naturally termed hulless barley.

The most pronounced success in breeding work, however, occurred when the hooded and hulless characters were combined in the one plant, and a new type possessing both characters was produced. Breeding and selecting new and improved types of barley is always an interesting study, and one in which results are being frequently obtained. Quite recently another type has been bred which is without awns or hood and may be called a true, beardless barley.

growing in combination with early maturing oats, such as the Daubeney or Alaska. The results obtained at Macdonald from sowing grains in combination have clearly shown that increased returns are secured by such a practice. A five years' test of the six-rowed variety Mensury sown in combination with the Daubeney oat has given an average yield of 3,262 pounds of grain in comparison to an average of only 3,009 pounds of grain for the Mensury and 2,175 pounds of grain for the Daubeney per acre when sown alone in neighbouring plots. The six-rowed types are only suitable for sowing in




True Beardless, Hooded, Hulless, Six-Rowed, Two-Rowed, Erectum, Nutans

In discussing the commercial value of these different types and their suitability to Quebec conditions, it is necessary to note some of their chief characteristics. In the common six-rowed type, the principal varieties have rather compact heads, long awns, and a good strength of straw. Most of them reach maturity about a week earlier than the common two-rowed type and are generally higher yielders. They are used extensively in America for malt production, though most European nations prefer the two-rowed types.

The early maturity of the six-rowed barleys make them very desirable for combination with early-maturing varieties of oats. With those that are medium to late, it is necessary to use the later maturing two-rowed barley, such as the Duckbill or French Chevalier.

As mentioned above, the two-rowed barleys are divided into two botanical classes, one having an erect compact head, and known as the Erectum type, while the other is known as the Nutans or nodding-headed barley. In the former the grains are large and are arranged close together in a short, compact spike with slightly spreading awns. In the latter type the head is much finer, very open, and borne on a

slender, rather weak straw which bends over at the base of the head when the grain is ripe, giving it the characteristic nodding appearance. Both of the two-rowed types are late in maturing and are low in yield in comparison with the six-rowed types, consequently they are in general unsuitable for Quebec conditions. As mentioned before, the only place in which they might be preferred to the six-rowed types would be for sowing in combination with medium to late-maturing varieties of oats.

Of the newer, less widely known types, the first in order is the hooded barley. This barley, of which the most popular variety in this locality is the Success, is the earliest ripening barley that we have. This character combined with the fact that it has not the same tendency to tiller that most of the other barleys possess, make it the most suitable nurse crop for alfalfa that we have at the present time. The yield is slightly smaller than in some of the bearded varieties, but the absence of the awns will always make it popular around harvest time. It is not grown very extensively in the Eastern provinces at present, and it does not appear to be as well suited to humid regions as it is to the drier Western climate, but the production of higher yielding strains combined with a more general knowledge of its value as a nurse crop will tend to make this type much more commonly grown.

Following the hooded barley comes the hulless type. As the name implies, this barley threshes free from the glumes similar to wheat. For this reason it makes a heavier food for stock than the hulled barleys; it is not, however, of nearly as much value for malting purposes, as it has not as uniform a germination and brewers prefer to have the hull, as they use it for a filter in draining off the malt. In yield, the hulless barley is one of the best, if the yield is taken in pounds per acre instead of bushels, as the hulless barley weighs 60 pounds per bushel as compared with 48 for the hulled varieties. The principal objection to the hulless barley, however, is the weak straw, which causes it to lodge badly and is the chief hindrance to its widespread use. This fault will probably be overcome in time by the selection and breeding of improved varieties.

The last type which is of any importance at the present time is the hooded and hulless type. As it is only a few years since this barley was originated, very little is known about it at present. That it will prove to be a valuable addition to our barleys seems evident, but more work will need to be done with it before it will be ready for general distribution. It is probable that in time high yielding strains will be developed from it that will equal the common varieties that are being grown at present, and if such is the case, the awnless and hulless characters which it possesses will materially assist in making it popular with Quebec farmers.

In closing, it may not be out of place to compare standard varieties of the different types, according to the yield obtained from them at Macdonald. The figures given are the average for three years' results.

| Six--rowed. | Bushels per acre. | Pounds per acre. | Wt. per meas. bush. |
|---|---|---|---|
| Mensury..... | 63.07 | 3027.36 | 48 |
| Two-rowed Erectum. | | | |
| Duckbill..... | 53.60 | 2572.80 | 48 |
| Two-rowed Nutans. | | | |
| French Chevalier | 50.67 | 2432.16 | 48 |
| Hooded. | | | |
| Success ... | 48.34 | 2320.32 | 48 |
| Hulless. | | | |
| Guy Mayle..... | 45.76 | 2745.60 | 60 |

# Macdonald College Short Course Meetings.

*By Mr. R. Summerby, B.S.A., Lecturer in Cereal Husbandry.*

SHORT courses have always been a feature of the work at Macdonald. They have, however, varied in character, duration, place and in other respects from one year to another. For the past two years, six to eight large centres were selected in different parts of the province, and at these, lectures and demonstrations were put on, lasting for two days. These places were all conveniently located on the railroad and a large amount of demonstration material was taken around from one place to the other.

This year a new departure was instigated in that an attempt was made to reach a larger proportion of the province, including some of the more distant and outlying sections. Towards this end, one-day courses were arranged at twenty-two places in the province.

LECTURERS IN HOUSEHOLD SCIENCE.

Standing—Miss Hill, Miss Campbell, Miss Zollman. Sitting—Miss Fisher, Miss Phillips, Mrs. Rutter.

These meetings were essentially composed entirely of lectures, as it was not possible to carry around any large amount of demonstration material. They were, however, well illustrated by lantern slides on all occasions where it was possible to do so. Subjects embracing some of the more important phases of

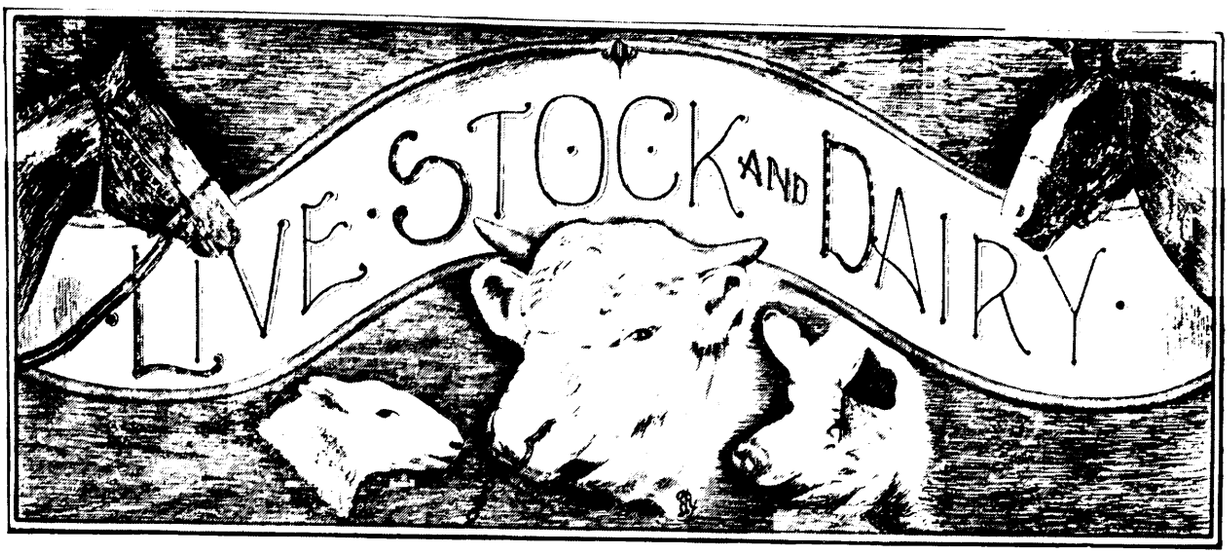
work pertaining to Live Stock, Field Crops, Horticulture, Poultry and the Farm Home were taken up, with special reference to the practical needs of the farmer and his wife in each section. The rural people were thus enabled to obtain a great deal of information that they most need relative to particular phases of their life-work and were also furnished with a channel through which they might obtain further information, by meeting the lecturers, demonstrators and specialists in the various lines of agricultural work.

Not only do the farmers derive benefit from these sources but the College also gets its recompense. It is able to get into close touch with the farmers of the various sections, their conditions and needs, and knowing these it is better able to direct its work in such a way that it will be of more real value to the rural people of the province.

In all, fifty-eight meetings were held in eleven counties, with a total attendance of over three thousand.

LECTURERS IN AGRICULTURE.

Back Row—Messrs. McClellan, Ness, Raymond, Gorham and Boving.
Front Row—Mr. Jull, Prof. Barton, Mr. Summersby, Prof. Bunting.




# *A Step in the Right Direction.*

THE sheep industry has never received its due share of attention in Canada. When one realizes that we have only a few over two million or about 1-262 of the total sheep of the world in this great country of ours, he is forced to stop and think. The conditions in Canada, natural and otherwise, are such as to lead one to expect a continually expanding trade in this branch of animal industry. The soil and climate in every province of the Dominion are generally favourable and adapted to the keeping of sheep. Geographically the country is so situated as to give it a peculiar advantage as regards competition in the great meat-consuming markets of the world. Notwithstanding these facts, the trade in recent years has steadily declined.

Besides the possibilities for expansion which are encouraged by natural conditions, there are other considerations that should receive our attention. Weeds are becoming one of the worst problems confronting the Canadian farmer, and it is a well established fact that sheep are great weed destroyers. Also, in certain parts of the Dominion, especially in our own province, are areas of waste land which, on account of its hilly nature, cannot be profitably brought under the plough. Such land is eminently suited for sheep raising. Through the initiative of Macdonald College, the Cheviot has been introduced into this province to be placed on these upland areas. This breed should do well in these districts.

One can hardly account for the decline of the industry, especially when you consider that the price of wool has greatly advanced the last few years, and the value of mutton has about doubled. Nor are these market conditions temporary, as Canada can scarcely supply her rapidly increasing home demands. The United States is also supplying its home consumption by decreasing the breeding stock, a measure which is suicidal to the industry, for when this practice has been followed for some time longer the home demand will far exceed the supply. In view of these two factors, viz., a steady increasing demand and a rapidly decreasing supply of mutton, it is evident that the Canadian sheep farmer need have no cause for worry about the future market, at least for many years to come.

Various reasons and *excuses* have been given to account for the heavy decrease in the number of flocks, chief among

these being the pestiferous dog. While it is true that the dog surely does a certain amount of damage, there is very little doubt but that the case is a little overdrawn against him. To overcome this dog excuse, for an excuse it is in many cases, Prof. Barton and Mr. MacMillan, of the Animal Husbandry Department of Macdonald College, have drawn up the following recommendations :—

Making use of the "Waste Lands." This should be seen on more of our rough lands.

RECOMMENDATIONS RE ACT FOR PROTECTION OF SHEEP AGAINST DOGS.

I. *Taxation.*—That this Act provide for the annual taxation of all dogs in the Province of Quebec.

Males to be taxed $1.00 each.
Females to be taxed $3.00 each.
Kennels to be taxed $5.00 each.

(*a*) All owners of dogs shall declare same to assessors annually. Penalty for neglect, refusal, or false statement in this connection will be $5.00.

(*b*) Dog taxes shall be paid to tax collector annually at the time when other taxes are collected.

Money collected in dog taxes and not used in compensation for sheep losses shall be used for other municipal purposes, and in the event of insufficient funds to meet the requirements for remuneration to sheep owners, money previously collected in dog taxes and used for other municipal purposes must be refunded by municipality for remuneration fund, and in case this be insufficient, remainder shall be paid out of the general fund.

II. *Sheep Valuators.*—(*a*) The Council of each municipality at its first meeting each year shall appoint one or more persons to be known as sheep valuators, whose duties shall be to inspect sheep killed, worried, or otherwise injured by dogs, within 24 hours after notification of same, such notification to be given within 48 hours after

losses occurred. Valuator shall value the sheep losses or injuries incurred in full and shall immediately report such value in writing to both owner and secretary of municipality. Such valuators shall be paid by the Council of each municipality.

III. *Remuneration.* (*a*) When owner of dog which has killed, worried, or otherwise damaged sheep can be found, said owner, upon sufficient proof being given, shall be liable for full losses or injuries caused by said dog ; where it is known that more than one dog is responsible for the losses or damages, liability shall be adjusted proportionately by valuators.

(*b*) When dog owner cannot be found, or when losses or damages cannot be collected for any other reason, the municipality shall pay to the owner of the sheep three-quarters of the losses or damages as given by the valuators.

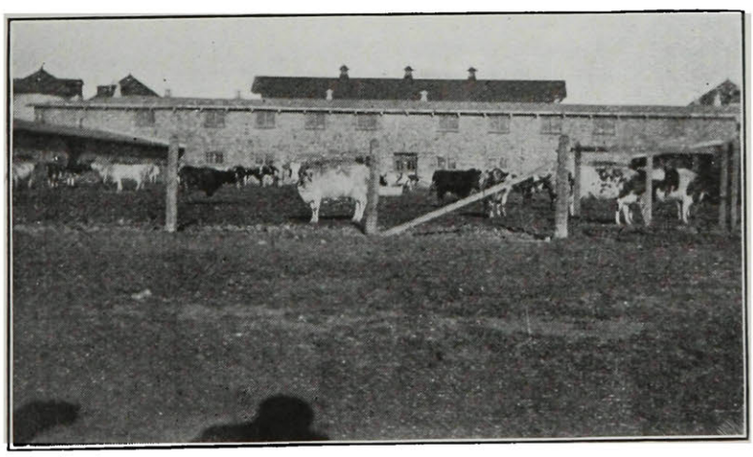
The maximum amount of such valuation, however, for which the municipality will be held responsible will be $10.00 each in the case of grade sheep, and $25.00 each in the case of purebreds.

(*c*) If sheep are killed or injured by dogs while running at large on the public highway, the owner of said sheep will have no claim for compensation under this Act.

IV. *Destruction of Dogs.* (*a*) Any dog caught killing, worrying, or otherwise injuring sheep may be immediately destroyed, and to any one who destroys such a dog the municipality will pay, upon sufficient proof being given, a reward of $5.00 from the compensation fund. In no case will such reward be given unless injury is reported by sheep valuators.

(*b*) Should the owner or owners of dog or dogs responsible for the killing or injuring of sheep be known, complaint may be made to a Justice of the Peace, whereupon the Justice shall investigate the matter, and if satisfied that the identification of the dog or dogs is correct, shall order the owner or owners to pay full losses or damages thereby incurred as given by the valuators, and to destroy the dog or dogs within 24 hours.

C. LYSTER, '16.



The College Herd.

# Animal Husbandry Club.

A RE-ORGANIZATION meeting of this Club was held on Oct. 16th. The Honorary President, Professor Barton, called the meeting to order and explained the object of this Club to the new students. Then proceeded the election of the officers for the ensuing year, with the following results—

*Honorary President*—A. R. Ness.

*Honorary Vice-President*—A. A. MacMillan.

*President*—A. G. Taylor.

*Vice-President*—L. C. McOuat.

*Sec.-Treas.*—T. H. Biggar.

*Committeemen*—W. Dunsmore, II year. A. Arnold, I year.

The club planned to put on a series of lectures by outside experts, which should be open to all students at all interested in live-stock work.

The first meeting of the Animal Husbandry Club was held on Nov. 11th. The president opened the meeting by a few introductory remarks and then called upon Mr. F. E. Came, the speaker of the evening. Mr. Came, in a very able manner, gradually brought about his subject, which was, "The City Milk Supply." In the course of his address he emphasized the value of sanitary stables and tested cattle, in order to produce milk of a low bacterial content. After an interesting discussion, the meeting adjourned, after moving a hearty vote of thanks to Mr. Came for his instructive address. T. H. BIGGAR, '16.

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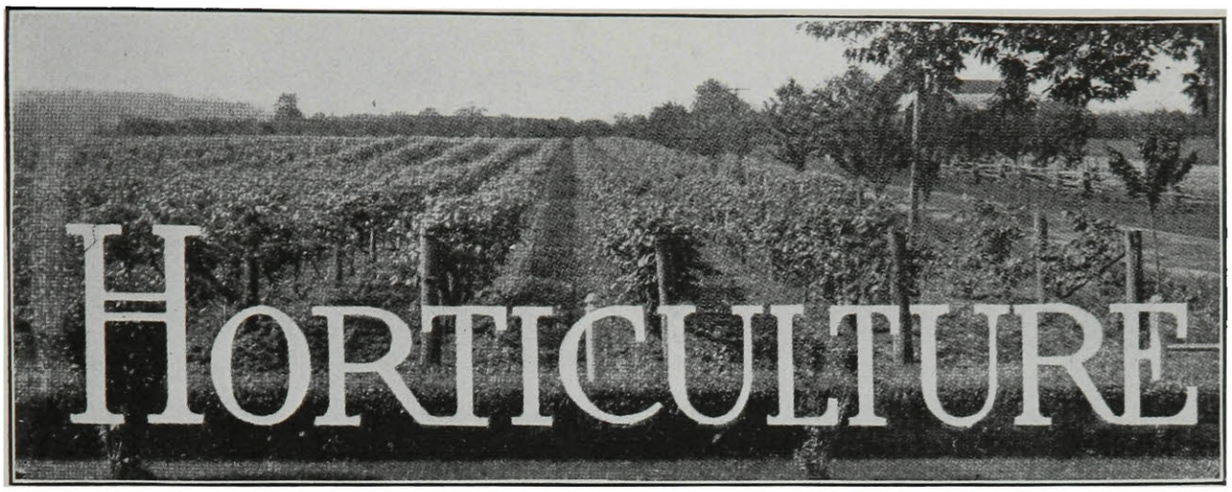
## The Old Warrior.

My good sword in its scabbard is,
Idle long years, and bound with rust.
My brothers' lips that tasted this
Are dust, as might and fame are dust.
Here, in my quiet ingle-place,
I hear the strife I knew before.
We have forgot our nation's grace,
Beneath the flaming hand of war.

Honour, I know, a man must hold
Above the blood of other men.
The generals of our race unfold
Valour and majesty again.
Yet, 'ere we go, upon our knees,
God teach us His humanity;
Lest, though we win, our enemies
Should know the greater victory.

—*Frances Beatrice Taylor.*




# *Shipping of Fruit in the Niagara District.*

*By H. J. M. Fiske, B.S.A., '14.*

TO fruit growers, fruit shippers and fruit buyers in the Niagara district, the shipping of fruit has become a matter of second nature, and, aside from the market worry, is almost mechanical in its simplicity of undertaking. At the same time, it must have careful supervision for assurance of good results. To the ordinary person not accustomed to shipping, neither participating in the work nor observing it, the process becomes one of peculiar interest.

Most everyone who eats fruit has an idea as to how that fruit was produced, whether it grew on a bush, a vine, or a tree, and they may also know where it came from, and some reasons why it should be adaptable to such a district. Many people may not know how the fruit was loaded for transport, and just why it arrives in the hands of the consumers either in a very tempting condition, or sadly otherwise. It is the intention of the writer, therefore, to give a short account of methods employed, and a few interesting facts about the work.

In the Niagara district there are many fruit loading points. Of these, St. Catharines is probably the busiest, and no doubt sends out more carloads of fruit per day throughout the entire season than any of the loading places elsewhere in the peninsula.

This year, without the usual large crop of peaches to handle, the shipping of ten to fifteen carloads from one point would be considered an exceptionally good day, as compared with last year, when between twenty and thirty cars often went out daily from this section of the district.

The fruit is picked, or cut, by the farmer and placed in baskets, boxes, or barrels, according to the article and the market demand. The most of the fruit, however, is shipped in the basket package—the six quart is a more convenient and popular size than the eleven quart basket—and for long distances the small basket, holding less fruit, allows for better isolation, more thorough ventilation and for better condition on arrival at destination.

The six quart basket packs more easily in the car, and can be placed very

quickly. It takes between 2,200 and 2,500 to fill a car with 20,000 lbs weight, which is the minimum, while 1200 eleven quarts will fill the same space. Twelve small or six large baskets are reckoned as 100 lbs. average freight for the season, since some kinds of fruit are much lighter than others. Grapes weigh 7 to 8 pounds to the six quart basket, while tomatoes, plums and peaches go 9 to 10 pounds, depending on how the basket is packed. The large basket is used more on the local and short distance market. Often a fruit grower will get as much for fruit put up well in a six quart basket as another will for an eleven quart carelessly put up.

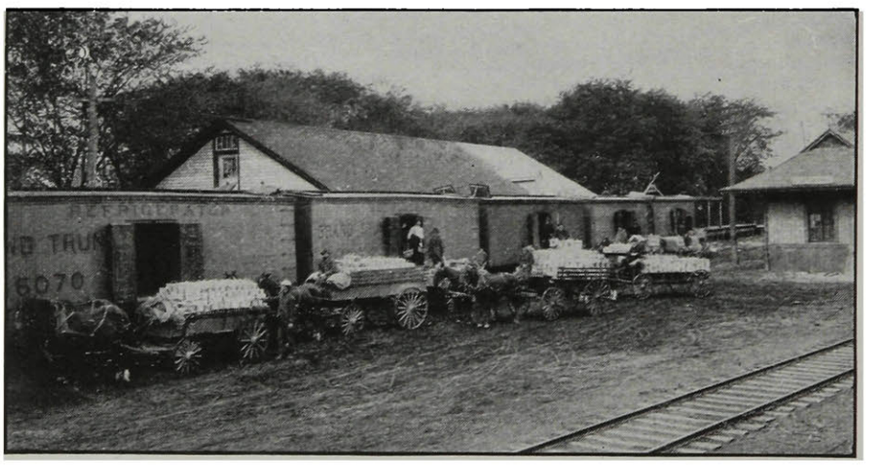
On the Toronto market the loose leno covering is used by many growers who take a pride in putting up attractive packs. It is said that baskets so covered sell first on the market, and always more readily than a package with the flat leno cover, which, in turn, sells more easily than the slat cover. The red leno is used for bright coloured fruit and vegetables, while the blue shows off the dark-coloured fruit better. Green leno is also used in some cases for cucumbers.

Boxes are used for the shipping of apples, pears, and peaches, but only a few growers feel safe in using them, unless they can have the packing done by experienced labour. An apple box will hold about 50 pounds.

Barrels are used in shipping grapes to wineries in cars, and will hold 200 lbs. The barrel is also used for apples, and as a package for squash, melons, etc.

For cabbage, melons, squash and cauliflower, rough crates are used, holding bout 75 pounds.

A special crate is used for berries and currants, and will average around 30 pounds. Other packages may be found in use, generally suiting the notions of the individual shipper. Corn is shipped as a rule in sacks.



St. Catharines Cold Storage.

In the packing of cars, the packages are placed so that the long way of the package will be the long way of the car, then the movement will be less in the shunting of the train. The handles of the baskets act as a brace and keep the packages in place. The packer starts in one corner, and keeping the baskets as close as possible may either pack all the way across the car or bring along one side at a time. Some shippers pack the car straight through, leaving no opening between the doors for ventilation. Others, however, leave a space of about two feet, break the pack on either side of the doorway, build straight up, and put in two gates, which are well

braced to prevent shifting of the baskets. This opening between the doors allows for the better circulation of cold air, and better condition of fruit on arrival at a long distance point, such as Winnipeg, Calgary, or other western points. It has been found that this gate system of packing cars gives good satisfaction. Using this system, a car needs only to be eight or nine tiers high, thirteen baskets wide, and about ten and one-half long on either side of the doorway for a carload.

The loose leno covered baskets have to be put on the top, or on shelves, to carry without injury. Shelves are used in box cars between St. Catharines and Toronto, and the cars thus shelved are returned when emptied, and are used only between these points throughout the season. They differ from ordinary box cars in having two windows for ventilation, covered with wire netting and diagonally situated in the ends of the car.

For long shipments, regular refrigerator cars are used, and these are iced, except in the case of straight cars of grapes, which arrive in better condition if left vented. Nearly all cars have mixed loads.

Various packers will report record time in packing a car of fruit, but about the best speed, with the packing done properly, would be one hour, and then sufficient fruit would need to be on hand and given the packer as fast as he could place the basket.

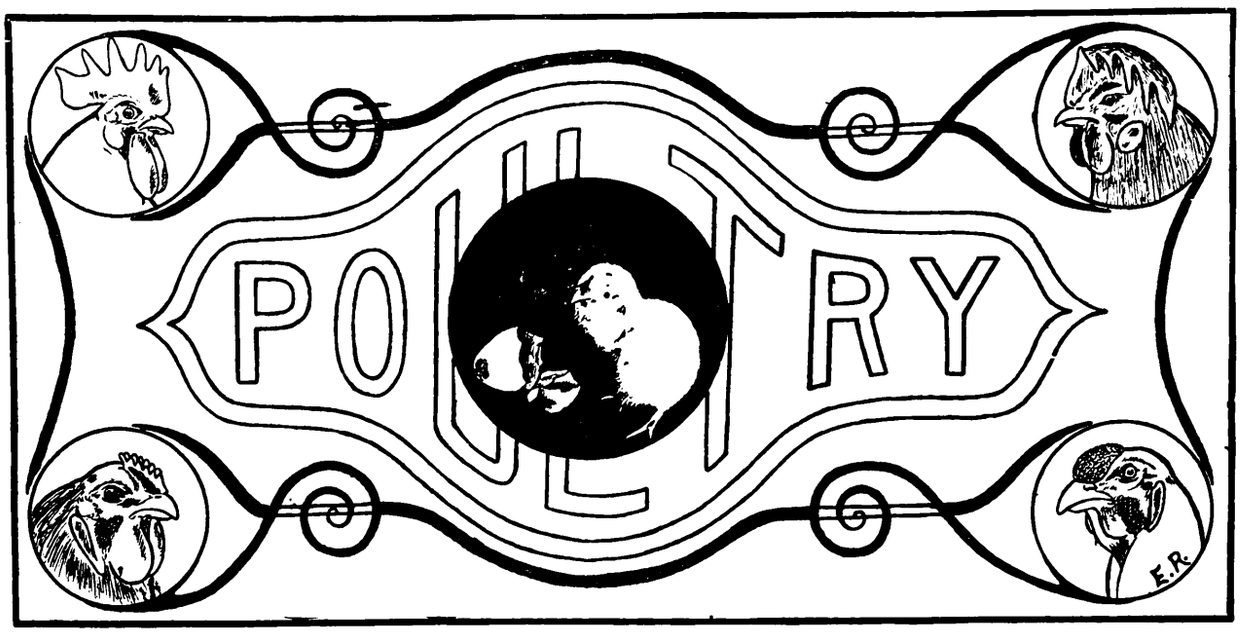
In a mixed car the heavier baskets are always placed in the bottom, and the lighter on top. The most perishable fruit is put as near the ice-bunkers as possible. The mixed cars are started as early in the season as the middle of June, and shipping stops about the middle of November, when the frost finishes the tomatoes and late fruit. Apples placed in storage may be shipped at any time.

Outside of the refrigerator cars, cold storage facilities are not needed by the average shipper, except where the fruit has to be kept over in the warehouse until shipped, then the cool room comes in handy.

The Dominion Government's pre-cooling plant at Grimsby cools the fruit before loading by running the loaded trucks into cool rooms first. The car also is cooled, and no warm air is allowed to get in while the fruit is being packed in and the doors closed tightly. This enables longer distances to be covered safely, with fruit arriving in good condition. This system is probably too expensive for the average shipper.

Much might be said about the varieties of fruit which ship the best, and are most in demand on our local and distant markets, east and west. Much also might be said about the vast possibilities of opening up many more outlets for the fruit grown in larger quantities even than at present. Suffice to say that although the fruit industry is growing in extent and is being better looked after year after year, yet with a faster freight service, allowing for cheaper transportation, and no pilfering, as is found in express shipping, the fruit can be transported more quickly and cheaply, and the business greatly increased in extent. The ready co-operation of the growers must be continued in the future, and care taken in putting only the right fruit in the cars in prime condition for shipment, so that it will arrive in the best of order, and in a uniform and attractive package.

The St. Catharines Cold Storage and Forwarding Co. is one of the oldest, largest and most successful of co-operative fruit growers' associations in Ontario, and its business is still increasing. Let all organizations of this sort boom and boost the great fruit industry.




# *Points of Importance Towards the Production of Strong Chicks.*

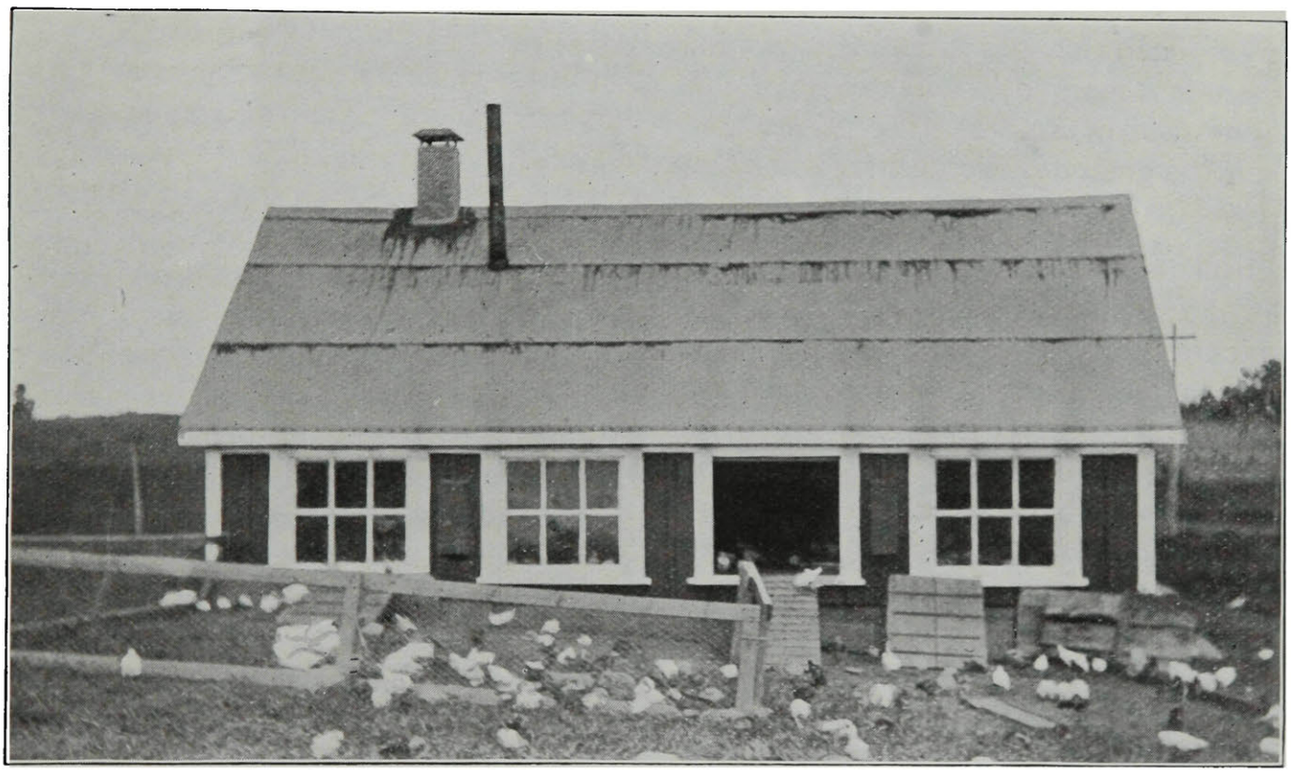
UNFORTUNATELY a large number of poultry raisers, or rather would-be poultry raisers, do not give the matter of raising their chicks any consideration whatever until it is time to set the eggs. This is a great mistake, whether the eggs are to be set under a hen or in an incubator. It is impossible to raise strong, healthy and vigorous chicks from poor parent stock or good stock wintered under poor conditions. A great many failures in hatching and raising chicks are due to unfavourable conditions before the eggs are set.

Whenever possible, the breeding stock should be selected in the early winter, and should receive special attention until the hatching season is over. The hens selected should be either yearlings or two-year-olds. Many poultrymen make a practice of breeding from pullets and have good results, but, generally speaking, it is not an advisable practice. A good method is to force the pullets, to a limited degree, during their first winter, and not breed from them. By doing so the egg laying qualities will be developed in the flock to a greater extent than when the eggs from the pullets are used for setting ; also they are not forced as much under these conditions. During their second year they should not be worked very hard, but must be kept in the strongest condition possible for breeding. Hens which are to be bred from should not be forced during the previous winter, as, without doubt, a heavy siege of egg laying must weaken their constitution considerably.

In order to secure fertile eggs, a strong, well-developed male bird should be mated with the hens. Opinions differ as to the best age to use for breeding. The male should be mature and yet not old enough to lack strength and vigour. In the general purpose breeds it is advisable to mate one male with eight or ten hens. In the egg breeds one male may be mated with from ten to twelve hens. This does not necessarily

mean that the flocks must be divided up in this manner, but that whatever size the flock may be the proportion of males should be as above. The plan of alternating the males is one used by many to-day. This is done by having a small coop, say two feet square, placed in the poultry house, and in a flock where two males are to be used one is placed with the hens and one in the coop, and changed either once a day or three times per week. This prevents the male birds from fighting, and also their eggs should be discarded. It is better to kill a few hens that are unhealthy than endanger the whole flock.

The hens should receive food which will build up and maintain a strong constitution, without forcing or over-fattening. Wet food is not desirable for breeding stock. The hens should have a supply of dry mash before them during at least part of the day. All the whole grain which they receive should be fed in a deep litter. This gives the hens a considerable amount of exercise which



The "Simplex" Brooder House.

gives them a good opportunity to rest and get plenty of food.

The breeding quarters should be the best on the plant, thus giving the stock every possible chance to produce strong chicks. The houses should be dry and well ventilated. The interior should be so arranged that the attendant may be able to keep a close watch on all his flock. If any symptoms of disease are seen, the fowls infected should be quarantined, and if they are laying, is absolutely essential to the production of strong chicks.

Any special care given to the parent stock will be doubly repaid by the results obtained in raising the chicks. There are few places where disease will spread faster than in a flock of young chicks, and if disease can be prevented much time and worry will be saved. An ounce of prevention is better than a pound of cure.

E. BOULDEN, Agr., '16.

# Poultry Notes.

*By M. A. Jull, B.S.A., Head of Poultry Department.*

INTERESTING results have been obtained (Unzeitig) from treating chickens with a given intensity of X-rays. After an exposure of two hours it was found that the body weight of the chickens was reduced considerably. Feathers often fall off. The number of follicles is reduced, but after the fifth day regenerative processes often set in. There is a marked loss in weight of the testes, which are very susceptible, and there is a great destruction of sperm cells.

° ° °

In a recent experiment conducted by the Missouri Experiment Station, in which a Silver Spangled Hamburg male was mated with a Brown Leghorn female, and a Silver Spangled Hamburg female was mated with a Brown Leghorn male, it was found that the pattern of the Silver Spangled Hamburg is sex-linked, but the pattern is not transmitted to the entire body. In all of the offspring of both crosses, the tail is pure black and shows no spangling sign whatever, but on the rest of the body the pattern is inherited as a sex-linked character. The Hamburg male and Leghorn female mating gave both spangled males and females, while the Hamburg female and Leghorn male mating gave only spangled males, the females being black with some scattered brown and golden markings.

° ° °

Artificial insemination of hens has lately been effected in France and the United States, resulting in a small percentage of fertile eggs developing.

In an investigation upon the physiological processes involved during digestion in the chick, Dr. T. P. Shaw, McGill University, has determined, among other results, that the glandular structures of the floor of the chick's mouth contain a ferment while the crop secretes no ferment. The crop acts as a digestive organ by retaining the food for a considerable time, thereby allowing the ptyalin in the saliva to act on the starch content. By the second day the stomach of the chick secretes a gastric juice containing ferments. The pancreatic secretion in the chick contains ferments which act best in slightly alkaline medium. The liver of the chick contains glycogen on the twentieth day of incubation, but it becomes glycogen-free twenty-four hours after hatching if no food has been given. Lactose (sweet milk) is not a glycogen former in chicks and acts as an irritant to the gastro-intestinal mucosa.

J. H. M.

# MACDONALD COLLEGE EXTENSION WORK FOR RURAL SCHOOLS

## *The Winter Life of Common Animals.*

*By Dr. D. W. Hamilton, Head of Nature Study Department.*

ALL animals are divided into *classes*. Those in each class have certain features in common. In our brief review of the winter life of our native animals we shall begin with those very low in the scale, *true worms*, and conclude with those highest in the scale, *true mammals*.

*True Worms*. We use the term true worms because many people improperly apply the term "worm" to caterpillars, grubs, and maggots that are the larvae (creeping stage) of insects. A familiar example of a true worm is the Earth Worm, called Angle Worm by fishermen. Earth worms are active in the upper layer of soil, particularly in rich gardens, during the summer. After a heavy rain one often sees them in great numbers on the surface of the soil. They have been "flooded out" for a short time. These worms are of great agricultural value. They live on particles of soil which become much pulverized in passing through their bodies and thus better fitted as food for plants. When winter approaches, earthworms crawl deep down in the earth, below the action of frost, and hibernate during the winter. In discussing hibernation of animals we must not forget that neither animals nor plants can live without breathing; and breathing demands the use of food materials, chiefly carbon. The oxygen breathed in unites with carbon in the body and heat energy is produced. During the hibernation of animals, however, respiration is slow and little food material is required. This is obtained from the tissues of the body where it was stored during the summer.

*Molluscs*. To this class belong oysters, clams, and other shell-fish. These are chiefly salt-water animals. The salt water does not freeze and therefore the shell-fish may remain active during the winter. Snails and slugs belong to this class. They are often found under rocks and logs where they hibernate in the earth.

*Crustaceans*. Crabs and lobsters belong to this class. They are aquatic animals, and can therefore continue active throughout the year. Crayfish hibernate in holes several feet deep.

*Amphibians*. This class includes animals which are at home on land or in

water. Frogs, toads, turtles and salamanders are well known examples. Many call salamanders "lizards." We have no real lizards in Canada. Salamanders, found under rocks and logs, are harmless. In fact, frogs, toads and salamanders are among our most useful animals. They live chiefly on insects, most of which are injurious. We are all familiar with the "croaking" of the bullfrog and the "piping" of the toads in the springtime. They spend some weeks in ponds and ditches laying eggs, and singing for our delight. In autumn they dig deep in the earth, or in the mud under water, and hibernate during the winter. Frogs have a smooth, moist skin. Toads have a rough, warty, dry skin. It is true that the skin of a toad contains an acrid substance which dogs do not like—it is seldom that dogs can be induced to bite a toad a second time—but toads do not cause "warts" on children, and they are not poisonous.

*Reptiles.* To this class belong true lizards and snakes. There are no lizards in Canada, but of snakes we have several species, none of which are poisonous. They are quite harmless and very beneficial because they live chiefly on injurious insects, and should be protected. Why is it that on seeing a snake the first impulse with most people is to kill it? Let us encourage children to protect useful and harmless animals.

*Fishes.* Fishes are typical water animals and are active at all times of the year. The habits of many are interesting. For example, the salmon spends the winter in the salt water at the mouth of rivers, and ascends to the head waters of the river in the spring. There the eggs (spawn) are deposited and the young fishes spend the summer.

*Birds.* The great majority of our summer birds leave us in autumn, and spend the winter in the Southern States, Mexico, West Indies and South America, returning in the spring. We call this migration. In this group are included all the sparrows, except the English sparrow, ducks, geese, warblers, robin, crow, blackbird, junco, swallows, bluebird, kingfisher, orioles, and many others. The Crow, Robin, American Goldfinch, and a few others occasionally remain with us during the winter. Many birds are permanent residents. This group includes the owls, the Downy and the Hairy Woodpeckers, the nuthatches, Blue Jay, Canada Jay or Moosebird, Black-Capped Chickadee, partridges, English Sparrow, and several hawks. In addition, we have winter visitors from the north, including the Snowy Owl, Snow Bunting or Snowbird, Pine Grosbeak, Red Crossbill, Red Poll, Pine Siskin, and the Horned Lark.

Because of the severity of the weather in winter birds prefer sheltered places in woods and are not often seen in the open. The English Sparrow is an exception. It is with us always. The Ruffed Grouse or Partridge, on the approach of a very cold night, plunges deep into the snow and remains there until the next day. By throwing out food, and by fastening pieces of suet to trees, birds are attracted about the home and are helped to pass the winter. Children should be encouraged to do this.

*Mammals.* Carnivorous or flesh-eating mammals may be divided into several groups. The Canine group includes dogs, foxes and wolves. These are active at all times. The Feline group includes cats, wild cats, panthers, tigers and lions. They do not hibernate. The Bear group includes bears, raccoons, mink, and weasels. The Black or Common Bear, which originally inhabited nearly all the woods of North America, hibernates throughout the winter, stowing itself away in hollow trees and caves

among the rocks where drifting snow will bury and keep it warm until spring. It is very fat in autumn but very lean in spring, when the skin on the feet cracks and peels off, leaving them soft and tender. The raccoon or " Coon," when cold weather approaches, curls up in a hollow tree and remains until the severest part of the winter is over. Occasionally several families will occupy the same tree. In winter the mink haunts the open rapids and warm springs in the woods, makes excursions under the ice of brooks looking for fish, or hunts rabbits in the snow. The weasel turns white on the approach of winter, excepting the end of the tail, which is black, and remains active, living chiefly on rabbits which are killed in large numbers.

Among herbivorous, or plant-eating mammals are the ruminants (cud-chewers). This group includes the cow, sheep, buffalo, goat, moose, deer and caribou. Moose, deer and caribou gather in herds in sheltered hollows of the woods, when the snow becomes very deep. They live on the leaves, bark and twigs of the surrounding trees. When spring approaches they leave these " yards" and wander through the woods.

Among rodents or gnawers are included our squirrels, mice, rabbits, groundhog, beaver and muskrat. The Red Squirrel is active during the greater part of the winter. The Striped Squirrel or Chipmunk lays away a store of nuts in autumn, and spends the winter in its underground rooms, living on its store of nuts. Rabbits and mice remain active. The Groundhog or Woodchuck sleeps all winter long in his hole in the ground. He is not an industrious fellow except when engaged in digging his burrow, when he works at a great rate until it is finished. During cold, rough weather the Porcupine retires to his home in a hollow log or cavern among the rocks, and sleeps in comparative safety curled up with his back to the entrance. Between cold spells he crawls out and stuffs himself with bark and green twigs. The Muskrat or Musquash tunnels in the bank of a stream from an entrance below the water level, and makes a chamber under the protecting roots of a tree. The chamber is lined with soft grass and moss, and there the three or four in a family spend most of the winter curled up asleep.

The home of the Beaver is most interesting. By felling trees and carrying branches, earth and stones, he builds a dam across a stream and thus makes a " beaver pond." In the pond is built a thatched and mud-plastered log-cabin of sticks and brush with the entrance below water and the living-rooms above water. In autumn an ample supply of birch and poplar twigs are stored in the cabin for winter food. They often leave the hut during the winter and explore various parts of the pond and stream beneath the ice, digging up roots from the bottom and gnawing the bark from bushes and trees surrounded by water. As their family increases in size the parents enlarge their cabin each fall to accommodate the new members. Certain ill-natured old bachelors often refuse to associate with the rest of the family and live apart in lodges of their own construction along the shore.

# The Making Change Method in Subtraction.

*By Miss L. B. Robins, B.A.*

THE close connection that exists between addition and subtraction has been seen by the race from time immemorial. The ancient Egyptians, many centuries before the signs + and — were invented, represented the process of addition by a pair of legs walking forwards, and subtraction by a pair of legs walking backwards, thus showing that they viewed subtraction as the inverse of addition.

### VARIOUS METHODS OF SUBTRACTING.

The Hindus gave to the world at least three ways of subtracting. These three methods will be illustrated by the working of the same simple example in the three ways, for instance, 83 minus 69. The first method is called the complementary addition method, and is as follows: 83—69 = 14 obtained thus 13 + (10—9) = 4. Add the dropped 10 to the 6. 8—7 = 1. This process is unnecessarily long. The second method is called borrowing and paying back where what is borrowed from the upper line is paid back to the lower. 83—69 = 14; 13—9 = 4; 8—7 = 1. The third fashion consists in reducing a unit of a higher denomination to its equivalent in a lower denomination, thus making subtraction possible. This latter method is old, has had a wide-spread history both in Europe and America, is simple of explanation, and still has a considerable following. It is done in this way, 83—69 = 4. 1 ten = 10 units. 70 + 13—(60 + 9) = 14.

### LEFT TO RIGHT WORKING.

The Arabs worked both addition and subtraction from left to right. An Englishman named Garth is said to have introduced this fashion to the European world in 1600. It has several advantages, especially for a man who has much calculating to do in earning his livelihood: (1) it helps to form the good habit of viewing both the beginning and end in calculation; (2) it has close connection with the concrete illustrations with coins from which it has come; (3) it serves as a check upon abstract computation by fixing the attention, in the first instance, upon the larger part of the answer to the problem; (4) it is an excellent preparation for dealing with answers which only require approximate results; (5) in the case of oral work, the answers can be given more accurately and readily than in right and left working, as the remainders are given in the order in which examples are read out. The good habit of looking ahead to see whether there is any coin to be changed or any carrying figure sharpens the wits of pupils. Take as illustration $7.84—$5.93. It is seen at a glance that $1 must be changed to ten-cent pieces and the partial remainders are given in the order of importance of the coins, 1 dollar, 9 ten-cent pieces 1 cent.

### WHAT THE MAKING CHANGE METHOD IS.

In one of our rural districts a little child is sent to a nearby neighbour's to

buy a pint of milk, in winter time. His mother gives him a five-cent piece with which to purchase the milk. He receives his change, two cents, from the neighbour, and hears at the same time this statement: "One pint of milk three cents, and two cents make five cents." This is in essence the "making change method" of doing subtraction. In teaching subtraction in this way the teacher has as assistants all the shopkeepers in the land. If you buy a pair of cashmere stockings for 63 cents at Goodwin's, Ogilvie's, Scroggie's, Morgan's, Murphy's, Hamilton's, in Montreal, or at any other store, and give in payment a fifty-cent piece and a twenty-five cent piece, the clerks in unvarying monotone would return your change with the words, "63 cents and 2 cents make 65 cents, and 10 cents make 75 cents," or even more briefly, "63 and 2, 65, and 10, 75." There is the force of public opinion behind the teacher who instructs her pupils in subtraction by the "addition" or "making change method," i.e., by raising the lower line to the upper, in abstract work. So this series of examples would be explained thus:

Examples:

| (1) | (2) | (3) |
|---|---|---|
| 8 | 75 | 7392 |
| —3 | —26 | —5635 |

Method: (1) The pupils think, What added to 3 will make 8? 5 will. (2) What added to 6 units will give 15 units? 9 units. What added to 3 tens will make 7 tens? 4 tens. (3) What added to 5 units will give 12 units? 7 units. What added to 4 tens will give 9 tens? 5 tens. What added to 6 hundred will give 13 hundred? 7 hundred. What added to 6 thousand will give 7 thousand? 1 thousand. Total remainder, 1,757.

Checks: (1) 5+3=8. (2) 26+9+40=75. Twenty-six, thirty-five, seventy-five. (3) 5635. 7+5=12; 6+3=9; 7+6=13; 2+3=5. 1757.

The check shows how the several increments raise the lower line to the upper. The unit's figure is first made right, then the ten's figure of the subtrahend is made up to the ten's figure of the minuend. In the last example we start with 5635, adding to it, in succession, 7, 50, 700, 1000, making right the minuend, one figure at a time thus: 5635, 5642, 5692, 6392, 7392.

### DIFFICULTIES OF PUPILS.

All methods are pretty much alike to children, if the methods are equally well explained. As the explanation of the "making change" method lies largely in the checking of the work, pupils who are required (and all should be) to check their subtraction by adding the partial minuends will enforce the reason in their own understandings with every example worked and checked. In the end the process of subtraction, as of other processes, must become automatic, for the well trained mind will produce the results with little or no expenditure of thought and with accurate and rapid precision. Whatever method pupils begin with they should be allowed to go on with, if possible. Teachers who have learned some other of the many ways of doing subtraction should know this method also, and be guided by circumstances with regard to its use.

### ORIGIN OF THE MAKING CHANGE METHOD.

This would hardly be an opportune moment to advocate the "making change" method in subtraction, as it has a somewhat unsavory origin, in view of events now transpiring in Europe, had it not acquired a very large following in Canada as well as in the United States. It is not so old as the other method in very common use in

Canada, namely, the third referred to in this article. The third name by which the making change method is known is the Austrian, so called because of the determined and vigorous efforts of the Austrians to introduce it into their schools. The Germans and Italians use the making change method, so it is sometimes spoken of as the European method. In the United States many schools begin with the making change method, but when pupils reach carrying in two column examples, i.e., the rule with carrying, they are taught by the third method referred to here, e.g., 53—38 would have its parts distributed thus : 40+13—(30+8). In the City of Montreal and in many other schools in the Province the " making change " method is in vogue.

### WHAT IS THE VALUE OF THE MAKING CHANGE METHOD ?

As soon as in the history of nations money-exchange replaced barter, the " making change " method in subtraction became a possibility. The teaching in the schools responds to the social demands of the community, as is shown in the elimination from modern arithmetic of obsolete forms and rules. The " making change " method in subtraction is a direct response to our social needs, and so must sooner or later replace other fashions of doing subtraction, for it has become the line of least resistance, since it is the method of the business world.

Then, too, it requires no memorization of facts not required for addition, because both addition and subtraction are performed by the addition process and the checks of the work are made by addition. It will be readily seen by teachers in rural schools that such an economy of time and effort as is implied in the above statement is well worth making. The work in arithmetic in the rural schools must be covered in five or at most in six years. Many pupils in such schools will get no more arithmetic than can be done in this time. It therefore behooves the teacher to bring all the forces of her mind to bear upon the saving of time. Good habits of thinking and acting must be formed by the habit-forming subjects of the curriculum, arithmetic, reading, writing, spelling, composition, drawing, singing, etc., and the content of the mind must be enriched by the informational subjects, geography, literature, history and nature study. Economy must ever be the watchword in rural schools, for art is long and the five years quickly fleeting.

The difficulties of teachers in respect to the teaching of arithmetic do not lie so much on the informational side as upon the habit-forming side of education. All the information on the subject could be given in three or four years easily, but the attainment of rapid, accurate habits necessitate the expenditure of twice that time.

Much time is wasted in requiring pupils to acquire half a dozen habits where one would suffice. When 9+8=17 is taught as an isolated fact, 8+9=17 would have to be taught as another isolated fact. Similarly 17—9=8 and 17—8=9 would be two other lone stars in the arithmetical firmament. The child who is economically taught, forms the habit of deriving immediately from such a fact as 9+8=17, the fact by commutation that 8+9=17, and the two subtraction facts that 17—9=8 and 17—8=9. This habit of deduction can be instilled very early, and once formed will enable the child automatically to look for deductions from other mathematical facts. It is the profligate habit of many teachers to separate the com-

mutations and the subtractions from one another by considerable intervals of time in their teaching, thus making it necessary for the child to form four distinct and separate habits. Then, too, the subtraction of common fractions, decimals, denominate numbers and subtraction in algebra are explained in different ways.

Were the making change method used for subtraction of integers, common fractions, decimals, denominate numbers and later for subtraction in Algebra, the time now devoted to explanations could be shortened, and time for habit-forming in accuracy and speed lengthened. Subtraction in algebra is most easily explained by adding to the lower line to reach the upper, and by this explanation mechanical work without understanding, the bane of algebraic teaching, is eliminated.

Besides, the making change method in subtraction makes for ease and rapidity in that shortest and best of all methods of doing division, namely the Italian method, where all partial dividends are omitted, the quotient and remainders only are recorded.

From time immemorial the rural teacher of the Province of Quebec has held the divine right of thinking for herself. The best teaching is done by those teachers who have, often doggedly, because of efforts made to encroach on this right, preserved initiative, originality, and spontaneity in respect to their work. The apology for urging teachers to adopt the " making change " method in respect to all subtraction must be that the establishment of such a convention in Quebec schools would make for economy of effort and time, and permit pupils to pass from one school to another without embarrassment.

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# *The Noon Hour at School.*

*By Mrs. Rutter, School of Household Science.*

WHAT do the mothers of today know of the " noon hour at school " in their respective communities? Those who have no children in attendance probably know nothing, and those who have may know little more, and yet this " noon hour " is a fact and a grave fact.

When parents look back to their own school days they must vividly recall memories of this hour, many of which are distasteful and not a few positively unpleasant.

In the home, parents strive in every way to inculcate in their children right habits of life and to make the environment wholesome and helpful. The child's conversation and all his activities are influenced by the home. He is assisted in the choice of friends by his mother.

When the call for "education" comes there is a change. Many children in cities and rural districts leave home after breakfast not to return until the close of the afternoon session, and the *school* becomes responsible for the child practically five days out of seven.

Have you ever asked yourself these questions: What supervision have my children at the lunch hour? Where is

the school lunch eaten? What are the habits of the children who take their lunch? Is it possible my child is hearing, in the wrong way, facts which only his parents should explain?

In the best school I have visited, the relation of the teacher to the noon hour had not reached a higher ideal than that of police duty. The idea was to keep the pupils out of mischief, or rather maintain "quietness." Have all schools even this supervision?

The noon hour at school should have an educational value just as the other school hours, and the cultural possibilities of this noon-time intermission are very great.

The growing emphasis which is being placed upon the value of the informal education of the schools—that which is given silently by the surroundings of the child and which is efficacious in the formation of cleanly and healthful habits and of good taste—makes it seem desirable that any food which the child takes in the school building, even if it is taken from a lunch-box, should be so served as to contribute to his training.

We talk very much and perhaps fancifully of the "larger homemaking" and "municipal housekeeping." There is danger perhaps of using the terms without grasping their real significance and importance. There are, certainly, however, many problems which vitally affect the welfare of children which cannot be settled by individual women in their separate homes. They call for the co-operation of all the women of a community. It would seem as if the first duty of the "larger homemaking" was in connection with the feeding of children.

Could the Homemakers' Clubs in the Province of Quebec find a more urgent, a nobler or more profitable field of service than that afforded by the "noon hour in school?" We can think of no object more worthy of our highest endeavours than that of child nurture, to the end of securing the highest efficiency of the responsible adult citizen.

Communities which are striving to perfect this work report most interesting results. In place of lunches of slabs of bread, eaten with unwashed hands, from a paper bag, in solitude, attempts were made to make the lunch a means of social training by sitting at table with paper napkins and lunch attractively arranged with one hot dish—soup or cocoa, cooked at school. The improvement in table manners was rapid as well as the quality of the lunch. An improvement in the quality and neatness of the clothing was apparent. On account of this hot addition to the otherwise dry, cold, luncheon, the children were brighter and worked much better. Children from the poorer homes dispensed with newspaper lunches. They also provided themselves with soap and one clean towel a week. The seat on the shady side of the school house was deserted by the "quiet children," who were busy preparing for or preparing their luncheon. The boys spent these minutes in their little kitchen garden where the potatoes, carrots, peas and onions were grown for the noon hour soup. The time spent in actual lunch eating was delightful. With neat hair and clean hands and face, each child seated himself at his desk, which he had prepared for the meal. A white paper napkin served as tablecloth, another for napkin. The contents of the lunch box were carefully arranged and then the hot course was placed before each child by the steward for the day or week. Proper habits of eating, careful chewing, neatness, thoughtfulness to others, were some of the lessons learned. At the

end of a very short time each child over eight years and upwards had prepared and served the hot dish for the day. These were dishes, of course, which the teacher had prepared several times during the little talks on nutrition. In this way an opportunity is afforded for co-operation between homemakers and school authorities, or even better, a chance for the pupil to make practical application at home of instruction given in school.

The only equipment necessary for the preparation of a hot dish is two large saucepans, or better, one large saucepan and one double boiler, one vegetable knife, one tin measuring cup, one tablespoon, one teaspoon, one wooden spoon, two large enamel or porcelain bowls, and one vegetable strainer. The cooking could be carried out easily on the box stove or other heater in use in any rural school.

A small cupboard would be necessary, with two doors which close tightly and lock. In this are kept the cups, spoons, plates and forks for the children who share in the noon hour lunch, also white paper napkins which are purchased by the hundred. One shelf should be reserved for labelled storage jars; salt, pepper, flour, butter, sugar and cocoa, being all that is necessary.

Six dish towels, six dish cloths, six scrubbing cloths, six flannelette dusters, would be sufficient linen for one year in the average rural school.

Two enamel dishpans and one good soap shaker would complete this equipment.

At the present time there is need of a different attitude toward food itself in order that its relation to education may become more clearly defined. That the Homemakers' Clubs will promptly institute a much needed reform along these lines and that those schools which are close to the source of educational ideals and which are comparatively free to put ideals into practice will one day, and it cannot be too soon, present to us a model noon hour at school, is the sincere wish of every right-thinking mother.

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# *The Quadrennial Revision of Text-books.*

*By Miss L. B. Robins, B.A.*

THIS year, 1915, is the year of the quadrennial revision of text-books for the Province. Every thoughtful teacher is interested in the text-books which are to be placed in the hands of her pupils and by which she must to a great extent be guided in her teaching. Fundamental changes will doubtless be proposed by the Committee of the Teachers' Association having the matter in hand. Now is the time to make representations if you have any decided views on the text-books which should be used. As it is proposed by the Protestant Committee of the Council of Public Instruction to select so far as possible only one text-book in each subject, of necessity the one selected should be excellent.

In arithmetic the text that is valuable for a rural school is not the best for the urban school. In the rural schools there is but one teacher for all subjects for five or even six grades. Of necessity much of the arithmetic is done by the pupils themselves as seat work, for arithmetic lends itself readily to rapid

check of pupils' work. It is therefore necessary that the arithmetic for rural schools be selected with great care.

SOME OF THE MARKS OF A GOOD RURAL ARITHMETIC.

1. The work is well graded so that pupils can pass from point to point without undue difficulty and consequent discouragement.

2. Explanations of processes lie in the form of presentation of the work, so that pupils are able to think their way through the fundamental processes with integers, vulgar and decimal fractions, compound numbers, etc., on their own initiative largely.

3. The answers to the questions should be incorporated in the book.

4. The problems should be in touch with rural life, but should embrace an ever-widening field of application to business and geography. Business methods have radically changed in the last 25 years. The arithmetics should show this.

5. The directions for work given to pupils should incite them to aim not only at securing understanding of their work but at accuracy and speed.

6. Obsolete business forms should have no place in the text. Modern business methods and those in most common use should be dealt with.

7. The material should be arranged to arouse the interest and meet the pressing needs of the children.

Very few text-books present well the first four years' work in arithmetic.

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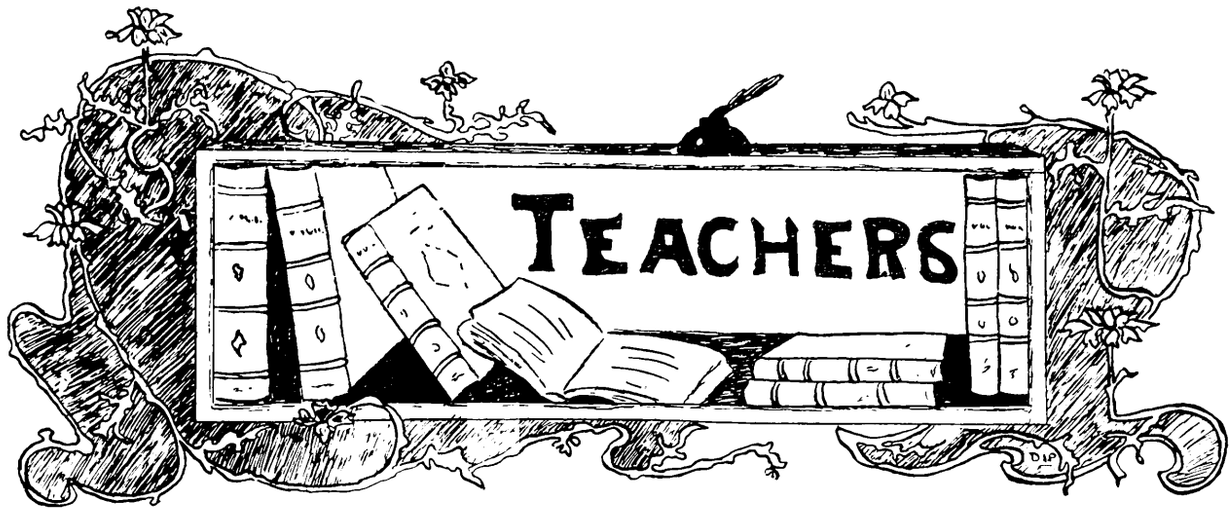
# *The Munich Convention.*

*By Miss L. B. Robins, B.A., School for Teachers.*

WHAT is to become of the International Commission on the Teaching of Mathematics which is scheduled to meet in Munich in August of the present year, and to report to the Congress of Mathematicians meeting in Stockholm in 1916? It would appear as though this meeting were doomed to go by the board, for the Commission has been working with active and passive delegates from all the warring nations and from most of the neutral countries, in the present war. The delegates represent Austria, Belgium, Denmark, Spain, Hungary, Great Britain, Italy, Norway, Portugal, the United States, France, Greece, Holland, Roumania, Russia, Sweden, Switzerland, Argentine Republic, Australia, Canada, Brazil, China, Cape Colonies, Egypt, India, Bulgaria, Chili, Mexico, Peru, Servia, Turkey and Japan.

This Commission, which has created a world-wide interest in the teaching of mathematics and which made an interim report to the Congress which met in Cambridge, England, in 1912, was planning an extension of its work in Munich next summer along the lines of the training requisite for teachers of mathematics, the value of intuition in the teaching of mathematics, the educational value of the subject, the place of calculus in the secondary schools and the proper training of engineers. The Central Committee of this Commission was composed of Prof. Klein of Gottingen, Sir G. Greenhill, London, Prof. Fehr of Geneva and Dr. David Eugene Smith of New York. It is safe to say that three members of the Central Committee will not be in Munich. Thus war destroys civilization.




# *The Spirit of the South.*

THERE is an indefinable atmosphere about the Southern States which makes an irresistible appeal to the stranger, and as he comes to know its people and its history he also comes to a fuller realization of what this charm really is. He feels admiration for its lofty ideals and for the undaunted pride of the true Southerner—that pride of race and honor which has never been tarnished by misfortune. There is no aristocracy on earth like that of the South. Here ancient and distinguished lineage are the essentials for proper social standing, as opposed to the standard of the North, where one's rank in the social scale is mainly determined on the merits of his banking account.

At first this pride of the Southerner for the achievements of his forefathers appears ludicrous to the Northerner, let us say, who has been trained in the broad ideas of the Twentieth Century. But here we have the key to this question. The Twentieth Century has not yet dawned for the South, living, as it is, in a dream-world of the days before the Civil War, the days of its glory.

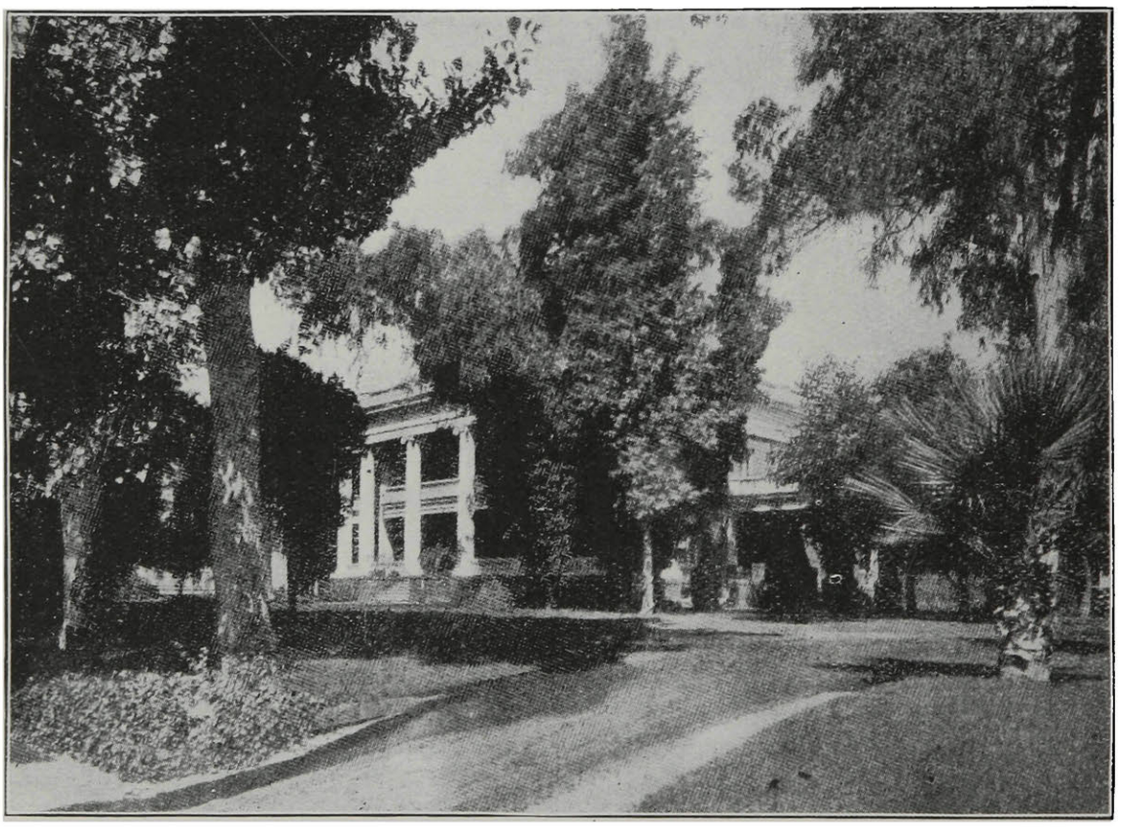
Besides the aristocrat there is another type of Southerner, radically different but quite as interesting. This is the mountaineer, or "poor white," as he is generally called. These people have lived for generations among the mountains, and by long association seem to have acquired some of the qualities of the silent hills,—their immobility, their coldness. In appearance they are pale and thin, they rarely speak, and shun civilization. But although the mountaineers appear so utterly devoid of emotion, they are well known to harbor fierce passions. Feuds between different clans often last for generations, and are a source of endless trouble and anxiety to the authorities whose business it is to preserve order in the wild mountain country. Civilization, however, does advance here, as everywhere else, and cases of murder and bloodshed in the name of vengeance for wrongs done several generations ago are, fortunately, becoming less and less frequent.

In the early days of the English colonization of this part of the country, settlers strove with one another to gain possession of the low, fertile regions, those who were unsuccessful in this being forced to make their homes in the mountains, from whose rocky, barren soil they were barely able to wrest a meagre livelihood. Comparison of their lot with that of the lowland planters, who were increasingly prosperous as time went on, engendered in the hearts of the mountaineers a jealous hatred

for their more fortunate neighbors. Then, when law and order became recognized and enforced, malefactors and outlaws fled to the hills, and mingled with the clans. Later generations inherited the traits of both these sets of people, the hatred of one for the lowlanders, that of the other for law and order. These two, being closely associated and correlated, in due course came to stand for the same thing in the minds of the "poor whites." The grandeur and stillness of the mountains, outlined against the blue southern sky, or seen at sunset with the wonderful changes of coloring, cannot fail to be awe-inspiring. Seen from a distance they stand like monuments to the bygone glory of the South, to the unflinching pride and spirit of the race which remained unconquered in defeat.

Visiting some peaceful spot, which was once the scene of terrible conflict during the Civil War, one almost fears to disturb the echoes, lest in doing so he should cause the spirits of old warriors of the North and South to spring up on all sides and combat again for the cause dearest to the heart of each.

To my knowledge there is no other country like these Southern States of the American Union so abundant in legend and romance. Old Southerners tell these stories generally relating to the days of slavery, or to events during the War which brought the South down from her high place and turned her wholly against the North, as being the cause of her misfortunes. But there is a new generation springing up in the South,—a generation which has laid aside the relics and traditions of the past, and is welcoming progress and modern ideas, a generation which is breaking down the barrier which has for so long separated North and South. The two are now being joined in a bond stronger than ever before, are facing the future side by side, and are becoming a Union well worthy of the name.



A Home in the Sunny South.

ROSA F. L. SHAW, T., '15.

# Life, Literature and Laughter.

ONCE read a book called "How to Live on Twenty-Four Hours a Day." It was an inspiring volume. The busy little bee improving each shining hour had nothing on this author as far as time-saving was concerned. His daily time-table was in part like this,—at 4.30 a.m., he arose and read a chapter of Epictetus, meditating on the same at breakfast. The "Wealth of Nations" helped him on the way to work and took up the lunch hour. In short, no fleeting moment was allowed to escape. Well, after a few weeks' training, I used to lie awake at night, calculating how many minutes per year I lost in sleep. I grew worse and worse, but still strove with Epictetus. One blessed evening reason returned. I threw the little book and Epictetus into the kitchen stove and spent three whole hours at the nearest picture-show.

It is time somebody protested against this well-nigh universal serious view of life. What is the use of worrying? One may become premier, but the world will still roll on after his departure.

A study of life in the street car bears out my assertion that taking life too seriously does not pay. Look at that solemn, pale-looking man in the corner. He is reading "The Decline and Fall of the Roman Empire," in ten volumes, and is so interested that he can't see the tired old lady clinging to the strap. Here is a jolly, red-faced individual, enjoying the "funny paper." What a sad sight! We can see him amusing the family at supper with his feeble jokes. Meanwhile number one props "The Decline and Fall" against the sugar basin and allows his wife to meditate on his greatness.

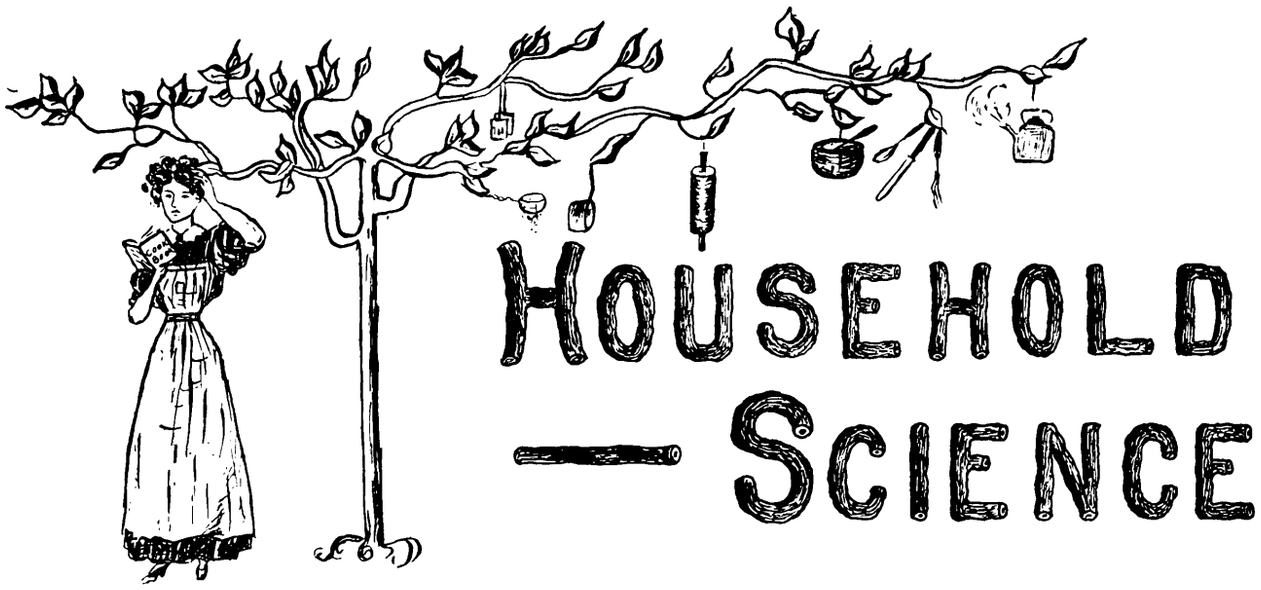
If one *must* read to live, read something that will bring cheerfulness into his life. A knowledge of great books (or possession of them) is certainly useful when one wants "filling" for an essay, but they are too heavy for the ordinary person. To misquote the poet:

"One glimpse of laughter in a novel caught,
Better than in a treatise lost outright."

Carlyle was a great writer, yet one would not have enjoyed spending his Christmas holidays with him. A course of reading in Carlyle and Carlyle alone, will not broaden one's mind in the proper manner. It is worthy of note that children like reading "The Pickwick Papers" and "Alice in Wonderland" rather than "Pilgrim's Progress." I remember that as children we studied "The Coverley Papers" and "Bacon's Essays"; needless to say we preferred the former. It is good sometimes to be like little children, who, through their innocence, can appreciate what is cheerful and good. Social workers assure us that the youthful criminal devours the dreadful dime novel. Who can doubt the great influence of youthful reading on our future lives?

The serious book, however, has its uses. As we like ice-cream, but could not exist wholly on such a diet, so the light and humourous tale should serve chiefly to beguile leisure hours. It may not endure like the monuments of the great departed; no need of that; for as long as some cheerful soul exists there will be a love of life and laughter.

J. W. BRUNT, T., '15.




# *Homemakers' Clubs.*

*By Miss F. Campbell, College Demonstrator in Household Science.*

QUEBEC HOMEMAKERS' CLUBS is the name given in the Province of Quebec to an organization which is today a strong factor for the betterment of home and country in every province of Canada. These organizations originated in this wise in Ontario about 16 years ago. Twelve years before this time the Government had established Farmers' Institutes for the purpose of helping the farmers to study the problems of the farm more intelligently and successfully. A number of women in that province, prominent among whom was the late Mrs. Hoodless, believed that such problems as the feeding, housing and providing of farm stock were *at least* of no more importance than housing, feeding and improving humanity. "The Government had planned the institute to aid the farmers solve the former; could it not provide an institution for the women to study the latter?" The Government rose to the occasion, and the result was that the Women's Institutes of that province were formed, which now number over 800, with a membership of 20,000. From Ontario this movement has spread from the Atlantic to the Pacific, gaining ground and steadily increasing in membership. This organization is known under different names in the various provinces, and is managed under different systems. But the aim of all these is practically the same, and the same lofty motto, " For Home and Country," has been adopted by every organization from ocean to ocean.

The United States has similar organizations in many States of the Union. The work there is supported by the Government and extended from various Agricultural and Household Science colleges within the States.

The history of this work in the Province of Quebec differs from that of other provinces, inasmuch as the women began this work by themselves without any assistance from the Government. The first organization of this kind was formed at Dunham, in March, 1910, under the leadership of Mrs. G. M. Beach. Mrs. Beach may justly be regarded as the pioneer of this work

in the Province of Quebec, and owing to her endeavours several branches were formed in Missisquoi County. Later, clubs were formed at Howick, 1911; Cookshire, 1912; Shawville, 1913. Among those who were the means of introducing the work into the county represented by these centres we find the names of Miss S. J. Armstrong, Bristol; Mrs. Alexander Younie, Howick, and Rural Dean Robertson, Cookshire.

College promised to aid the Clubs in every way possible until such time as the Government should come to their assistance. Just before the convention the Government was appealed to for aid in printing the handbooks. This appeal was granted. The clubs are very grateful for this aid, and look confidently forward to the time when they shall receive *the same consideration as the Farmers' Clubs.*

**Grandmothers, Wives and Sweethearts at a Happy Meeting of Homemakers.**

Macdonald College, from the beginning, took an active interest in the work, and finally appointed a demonstrator for these clubs, October, 1914. Prior to this time there had been no common organization for the whole province. Most of the institutes formed were using the handbook of the Women's Institutes of Ontario. In February, 1914, a convention of representatives from the first formed branches met at Macdonald College. A Constitution was drawn up and the name was changed to Quebec Homemakers' Clubs. The

The object of the Homemakers' Clubs as set forth in the Constitution is as follows :—

The object of Q. H. Clubs shall be to study the most scientific way of conducting home work in order to economize, strengthen and preserve the health of the family; to discuss the best expenditure of money in order to secure the highest conditions of home life ; to provide better financial, social and intellectual advantages for farm boys and girls and yet keep them on the farm; to carry on any line of work which has

for its object the welfare of home and community life. All clubs organized shall be strictly non-partizan and non-sectarian in every phase of their work, and no clubs shall be operated in the interests of any party, sect or society, but for the equal good of all citizens.

A society with such an object cannot fail to be of interest to every woman. Every woman is at some time or other in her life either engaged in making a home for herself or helping someone else to make one. It is precisely for this reason that the work has spread so rapidly within a few years. Originally intended for the farmer's wife, it has enlarged until it includes not only the women of the rural districts but of the villages and towns as well, and in so doing produces a feeling of good fellowship and sociability which is a part of the work not to be lightly thought of.

The very fact that such clubs exist shows that women are beginning to realize that homemaking is a profession and as such requires training. A few women will say, "I know *all* about housekeeping and can train my daughter myself." But can she? Let us see what is involved in the first clause of the object. There is the knowledge of chemistry of the substances met with in cooking, cleaning and the care of the house; the knowledge of bacteriology in order to understand the laws of sanitation and disease; a knowledge of home sanitation, which includes ventilation, heating, lighting, water supply and plumbing; a knowledge of food and diet, personal health, textiles and clothing, household finance and management, and last, but by no means least, intelligent motherhood.

Very few housekeepers, I am sure, can claim a knowledge of all these subjects, and the sanguine people who say, "Oh, a girl can easily learn how to cook and keep house when she has to do it," are fortunately becoming fewer. Of course, she can learn through time, but think of the trials and the waste of time, energy and money before she gains her experience. Is it wise to experiment with life, health and happiness in this way? The members of the Q. H. Clubs evidently do not think so.

It will be some years before adequate training schools will be established in all parts of the country, and the number of women who have the time or opportunity to take advantage of Household Science Schools are comparatively limited. Just now the Homemakers' Clubs seem to be the best solution of the problem. In the club, women have the advantage of gaining knowledge from those who have had the benefit of a Household Science training, and also from those housekeepers who are qualified to advise from years of experience and observation.

There are clubs and clubs—temperance, philanthropic, cultural and so on, but we feel that there is room for yet another, one that has for its object the most fundamental and general of all problems, the solution of which may perhaps solve many other problems—the well-being of home. If temperance, love of mankind and culture be not of the home, societies, no matter how earnest their endeavours, will never reach the goal they seek. It is gratifying to see that the old graduates of the School of Household Science are always among the most active and enthusiastic members of the Q. H. Clubs in their communities. This shows that their course of training has opened their eyes to the possibilities of such an organization.

The work of these clubs should be of especial interest to the students in the School for Teachers. They well know

what better homes, better surroundings, and improved conditions of country life mean to the school and the teacher in their midst. We feel that we shall have the hearty co-operation of the School for Teachers with the School of Household Science in connection with this work, and look forward to the aid of the graduates in introducing the work into new districts. Clubs have been formed in the counties of Missisquoi, Pontiac, Ottawa, Argenteuil, Shefford, Compton and Huntingdon, but we wish to organize in every county of the province.

This year, besides " business as usual," the clubs are working for the soldiers. Knitting, sewing and collecting funds for the Red Cross Society goes steadily on, and now one Club writes, " We shall stop knitting for a while to make fruit cake and candy for our boys at the front, that they may not feel so very far from home when Christmas Day comes."

Just what we achieve depends largely upon our will and the combined efforts of the women of this province and of every province of Canada, who are banded together with the object already stated, the attainment of which will not only benefit the present generation, but, still more, leave its impress on the nations yet to be.

" There is no chance, no destiny, no fate,
Can circumvent, or hinder, or control
The firm resolve of a determined soul.
Gift counts for little ; will alone is great,
All things give way before it, soon or late.
What obstacle can stay the mighty force
Of the sea-seeking river in its course,
Or cause the ascending orb of day to wait ?
Each well-born soul must win what it deserves,
Let the fool prate of luck. The fortunate
Is he whose earnest purpose never swerves,
Whose slightest action or inaction serves the one great aim.
Why, even death stands still
And waits an hour, sometimes, for such a will."

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## *Man's Weight in Bullets to Kill One Man.*

In spite of the efficiency of modern weapons, it is estimated that the average weight of bullets required to kill one man in the present war is something like 168 lbs. This is a little more than the weight of the average man himself.

—*Popular Mechanics.*

# *The Charge of the Knitting Brigade.*

Half a stitch, half a stitch,
Half a stitch onward,
In the assembly hall
Toiled the One Hundred.
"Forward the Knitting Brigade!
Charge for the wool," she said:
Straight at those skeins of yarn
Dashed the One Hundred.

"Forward the Knitting Brigade!"
Was there a girl afraid?
Not tho' each unskill'd maid
For a while blunder'd.
Theirs not to make reply,
Theirs not to reason why,
Theirs but to knit or die!
So at that wool four-ply
Charged the One Hundred.

Balls to the right of them,
Balls to the left of them,
Balls all about them,
Lying unnumber'd!
Gallant the charge they made,
Dauntless and undismay'd;
Fearsome and fast the raid
Of the One Hundred.

Click'd all their needles there,
Click'd as they turned in air,
Jabbing a finger bare,
Letting fall stitches where
Someone still blunder'd:
Stitches "two plain, two purl,"
Knitted each zealous girl,
Ninety-nine hundred!

Wristlets to right of them,
Wristlets to left of them,
Wristlets all around them,
Lying unnumber'd!
Back from the charge came all,
None did in battle fall.
Answer'd the muster call
All the One Hundred.

When can their glory fade?
O! Wild the charge they made!
All the school wonder'd.
Honor the charge they made!
Honor the Knitting Brigade,
Noble One Hundred!

Solicited by M. TRAVERS, T., '15

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## *The Firs.*

By ALIX THORN.

Against the sky they stand serene and stately,
The pointed firs, swift seasons come and go,
They watch unchanging, splendid summer glowing,
Then at their feet there drifts the spotless snow.

Toward sun and stars their proud heads ever lifting,
A message wonderful they seem to bring;
Forever green, forever strong and fearless,
They breathe the promise of eternal spring.

# The Winter Short Course.

SURELY a dead title? Agreed, but things generally even up pretty well, and in this case nothing is truer. If anything or rather if any group of persons could be said to be not dead, then it should be said of our short course science students who have entered since the Christmas holidays.

The position which all of the short course girls hold is rather a peculiar one. Despite the fact that they enter on the same ground as the rest, either in the fall, at Christmas or at Easter, yet because they are only present for a few months, they practically no sooner get into the rhythm and enjoyment of College life when they must quit everything, relinquish all friendships and go home to put in practice what Macdonald has been able to impart to them in their three months' stay. We do not for one moment pity them because of their going home. Be it far from us to entertain such a thought, but at the time of leaving it is hard.

Although they have only been with us one month, yet we have evidence that our winter short course students are strong not only in numbers but in their ability to assist in our College entertainments. We wish to express our thanks and wish them all success in their work.

WINTER SHORT COURSE STUDENTS.

President—Miss Myrtle Marston. Secretary—Miss Irene Simpson.

# Faculty Items.

THE Macdonald College Club held its December meeting at the home of Dr. and Mrs. Snell. Mr. G. W. Latham, Lecturer in English in McGill, gave an address on the "Hundred Years of Peace." The musical programme included a violin solo by Miss Reynolds and a vocal solo by Mr. Stanton. At the January meeting, held in the Teachers' Residence, Prof. C. W. Colby spoke upon "The Great War from the Standpoint of History." Mr. Dupre and Mr. Stanton contributed to the musical programme.

The Macdonald Snow-Shoe Club held its first meeting of 1915 on January 5th. There was a good number present, ready for the first tramp of the season. After the officers were elected, the Club, with Mr. Fraser as guide, tramped across the river to Isle Perrot and on returning were entertained by Mrs. Bunting.

On January 11th, the Club held a skating party on the College rink. There were about 35 members present, the ice was good and all enjoyed themselves, both on the ice and at Mrs. Fraser's, after the skating.

On January 25th, fourteen members of the Club met and after an enjoyable tramp, returned to the Teachers' Residence for refreshments.

The Club meets every Monday evening, at 8 o'clock.

The Officers for the present year are:—

*President*—Prof. Fraser.
*Vice-President*—Miss Jenny Reid.
*Secretary-Treasurer*—Mr. A. C. Gorham.
*Committee.*—
Mrs. Fraser.
Miss Jessie Gray.
Miss Alice Brownrigg.
Mr. A. MacLaurin.
Mr. P. I. Bryce.

On Monday evening, January 18th, Mr. A. N. Shaw addressed the Bachelors' Club, taking as his subject, "Modern Views as to the Constitution of Matter." The address aroused much interest and led to a lively discussion.

In the early part of January, members of the staff of the Schools of Agriculture and Household Science were much occupied with short course work. Courses were given in twenty-two different centres, fifty-eight meetings being held, with an average attendance of 58. The nineteen members of the staff engaged in this work gave an aggregate of 93 addresses, the number given by an individual varying from one to twelve.

Mr. A. E. McLaurin, B.S.A., has been appointed Assistant in Animal Husbandry. Mr. McLaurin, whose home is at Vankleek Hill, Ont., graduated from the Ontario Agricultural College in 1914. He was a member of the judging team sent to the Chicago International Fat Stock Show in 1913, and won the Barton-Hamer medal, which is awarded to the member of the Guelph team taking the highest score, provided he also wins a place among the highest ten scores in the general list. Since his graduation Mr. McLaurin has had charge of the Drainage Demonstration work in Ontario, under Prof. W. H. Day.

The great majority of the male members of the staff have joined the Officers' Training Corps and are showing much interest in drill and rifle practice. It is realized that this drill entails a great deal of extra work upon the Principal and his generosity in this respect is generally appreciated.

Prof. and Mrs. Murray arrived at the beginning of January and have taken up their residence in the house formerly occupied by Prof. and Mrs. Klinck.

Dr. Harrison has received a letter from Dr. C. C. James, referring to the agricultural campaign for " Patriotism and Production, more than Usual," of which Mr. A. P. Westervelt has been appointed the Director. Dr. James suggests that every one of our experts should in this campaign do at least a little " more than usual."

In the Christmas vacation Dr. Harrison attended the meetings of the American Association for the Advancement of Science and the Society of American Bacteriologists at Philadelphia.

Prof. Barton and Mr. Jull attended the Guelph Winter Fair in December. Prof. Barton delivered an address on the Live Stock Situation in Quebec. Mr. Jull also attended the Poultry Produce Association meeting in Guelph in January.

Dr. Snell attended the annual meeting of the Vermont Sugar Makers' Association at Montpelier, Vt., on January 19th and 20th, and served on the judging committee.

A second son was born to Mr. and Mrs. Vanderleek on January 23rd.

Some of Our Senior Girls.

# Macdonald College Agricultural Alumni Association.

Mr. F. H. Grindley, of Class '11, spent the Christmas and New Year's holidays with friends in Bermuda. Excellent scenery, glorious weather and a generally pleasant trip were experienced during his stay in the south.

Mr. W. H. Brittain, Class '11, Provincial Entomologist and Professor of Zoology of the Truro Agricultural College, is taking up graduate work at Cornell University during the next few weeks.

Mr. E. M. Straight has accepted a position as director of Farm Demonstrations at Concord, New Hampshire. His new address is 31 South Street, Concord, N.H.

Mr. G. W. Wood, of Class '11, has resigned his position as Assistant Professor of Animal Husbandry at Manitoba Agricultural College, and has joined the extension staff of the North Dakota College of Agriculture.

Mr. R. Innes, of Class '11, is serving his country as Musketry instructor at Halifax, N.S. Bob's wide experience in military matters will stand him in good stead in this capacity.

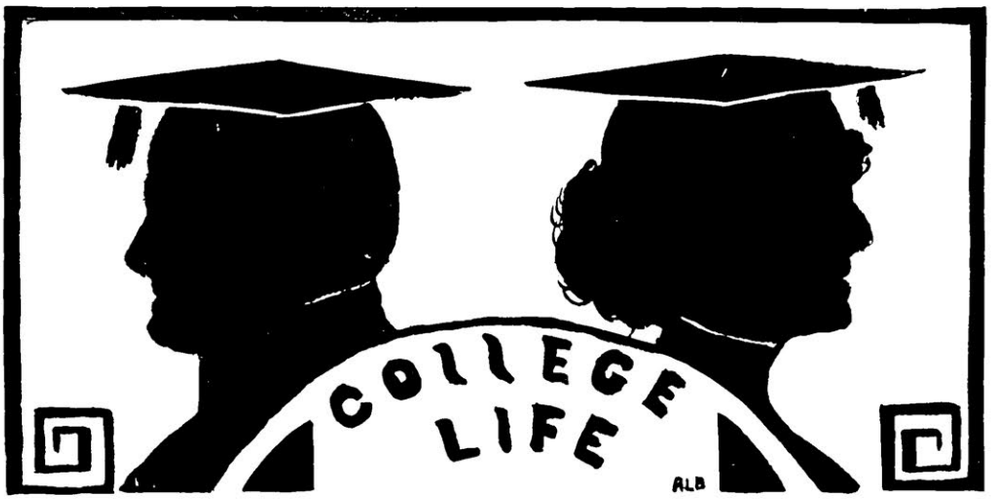
Mr. J. M. Robinson, of Class '12, who has occupied the position of assistant to the Superintendent at the Dominion Experimental Station at Kentville, N.S., is now in training with the second contingent for overseas service. Mr. Robinson has joined a cyclist corps and is training at Halifax.

Mr. W. W. Baird, of Class '12, Superintendent of the Experimental Farm at Nappan, N.S., attended the recent convention of the Dominion Experimental Farm Superintendents at the Central Experimental Farm, Ottawa.

Mr. R. I. Hamilton and R. Huestis have joined the Canadian Veterinary Corps and are now in training with the first Canadian Contingent at Salisbury Plains.

## All Through the Night.

When looking into two blue eyes
Which gaze straight back at you,
When watching red lips curve and pout
What else could mere man do?
Her golden hair lay on my breast,
My arm embraced her waist,
Her little hand within my grasp
In confidence was placed,
And I, fresh from the teacher's art
In tango and maxixe,
Trod all the very latest steps
With skill the tyro seeks.
I lame ducked first with whirl and dip,
Then when I saw a tear
Upon my darling's cheek, I changed
And waltzed the little dear.
The clock struck "one," the clock struck "two,"
My strength was almost spent,
Still through the mazes of the dance
Unflinchingly I went;
Until, at last, into her face
I took a stealthy peep.
And found, oh joy, my little babe
At last had gone to sleep.




### THE MEN STUDENTS LOSE THEIR BEST FRIEND.

Much regret is felt and expressed by the students over the recent departure of Mr. McPhee, the janitor in the Boys' Building, to Wells University, where he

MR. JOHN McPHEE, "MAC."

takes up a better position than the one he held so ably here.

"Mac" was a good and faithful worker and a still better friend of the boys. In so far as his duty allowed him, he was ever willing to lend a helping hand or do any possible favour for any one at any time, and especially was he in evidence on opening and closing days when he helped destroy, as much as possible, the evidence of the "night before."

Perhaps of all the many favours which Mac did the students, there was only one which they did not always appreciate, and that was his proficient use of the rising bell. Every morning at 7 o'clock he made his rounds, bell in hand, endeavouring to bring back to the world of realities the sleepiest of the sleepy.

Mac soon got to know the bad cases and nothing pleased him better than to practise his skill upon them. This he did by giving an extra twist to that excruciating noise factory of his whenever he passed one of the chronic cases, with the result that many a fellow got up who otherwise would have slept in.

Mac took great interest in all our games and acted as consulting editor on the College Magazine. His sense of humour saved many a critical situation and kept many a fractious freshman out of trouble.

The students endeavoured to show Mac their appreciation of this geniality and kindness by presenting him shortly before his departure with a purse of money and a suitable address, conveying the sentiments of the men in Residence. His memory will long remain with us, and we can only again state that we wish Mac and his wife and family every good fortune in the position he has just left to assume. J, E. M.

## MACDONALD COLLEGE LITERARY SOCIETY.

On January 25th practically every student at the College assembled to hear the varied programme which the College Literary Society had succeeded, after several desperate efforts, in arranging in some concrete form. Why we say *desperate efforts* it might do well to explain. What we mean is that practically everyone became of a sudden unable to " do " anything for the Society and consequently a lot of coaxing was necessary. Hence the word *desperate.*

Possibly more than a few, on entering the Assembly Hall, possessed the feeling that this was going to be a night lost. If so, then all the more credit is due to the executive since everyone came away with the expression, " I'm glad I came," or " wasn't that splendid ?"

Although the chairman held to formality long enough to have the minutes read and give a few introductory remarks, he forgot it all when introducing Mr. J. E. McOuat to the audience. Previous to this the college orchestra rendered some very pleasing selections. Mr McOuat gave a very amusing reading and put everyone in the humour to enjoy a laugh.

The new patriotic song, " England's Daughter," was done justice to by Mr. A. E. Hyndman and a chorus of male voices. Miss Portray, Messrs. Kelsall and Schafheitlin furnished a comparatively new and therefore much appreciated item—an instrumental trio. Following the musical selections Miss Montle almost surpassed herself in the life-like manner of her rendering two pieces of elocution. They were indeed splendid.

Since the evening had been accepted by all as very *new*, the surprise on hearing that a song, strange to our ears, which Mr. Stanton had just favoured us with was of his own producing, was not so great as it otherwise might have been, but it received hearty applause.

The Originators of The Soldier's Dream. (See account of College Literary Society Meeting.)

Miss E. Wright gave a very pleasing piano solo, a great contrast to the next item—the Bum Band. I do not mean to say that the Bum Band was not pleasing, at least, I dare not say so, but it was surely a terrible contrast. Since it was the cause of Britannia's—alias Miss M. Harris'—appearance, it also deserves praise. While the band played "Rule Britannia," Miss Harris came out on the stage, dressed as Britannia, trident, crown and all, and the audience stood while they sang the chorus of this old patriotic song.

Then followed, what was probably one of the best items on the programme. It was entitled "The Soldier's Dream." It showed a wounded soldier, all bandaged up, who was smoking, while reclining in an arm chair. To one side was a large picture frame, in which girls appeared who represented the different girls he had been especial friends with at one time or another. The following are the girls and what they represented along with the music which accompanied each.

The Charming School Girl—Miss G. Cornell, *School Days.*
The Dainty Milk Maid—Miss P. Leet, *Peg O' My Heart.*
The Summer Girl—Miss E. Kingman, *By the Sea.*
The College Girl—Miss J. Hodge, *Come Fill Your Glasses.*
The Winter Girl—Miss M. Blackader, *Jingle Bells.*
The Musical Girl—Miss L. Hutchison.
The Debutante—Miss L. Johnson, *Un peu d'amour.*
The Reading Girl—Miss Ibbotson. *Pony Boy.*
The Actress—Miss D. Hicks, *This is the Life.*
The Red Cross Nurse—Miss Westbrooke *Tipperary.*

Miss Green was the accompanist for all these girls and she deserves great praise for the able way in which she carried the act through.

College songs and the National Anthem closed one of the most enjoyable evenings ever provided by the Literary and Debating Society.

J. G. C. F.

### SECTION "A" LITERARY SOCIETY.

On December fifteenth, the Literary Society of Section "A" held their second meeting. Wishing to make these meetings pleasant as well as profitable to her fellow-students, the president had previously suggested that a debate be held.

When the moment came for electing debaters everyone tried to disappear from sight. When at last the speakers were chosen it was rather a case of "Some have greatness thrust upon them" rather than willingness to speak.

A variety of subjects was proposed but the one unanimously agreed on was —Resolved that the girls derive more benefit from Macdonald College than the boys. The affirmative was upheld by Miss D. Cruikshank and Miss H. Cowan, while the benefits of the boys were upheld by Miss Clyde Corbett and Miss G. Armour. The debate was thoroughly enjoyed by all. Both sides had some valuable information to present, but as we ladies all feel that the boys receive the greater benefits, the arguments of the affirmative were not found to be as convincing as those of the negative side.

H. C., T. '15.

### SECTION "C" LITERARY SOCIETY.

Wednesday evening, December 16th, was a gala night for Section "C." The Literary Society held its meeting, not in a cheerless classroom, but in the Faculty

Residence. Our hostess, Miss Robins, welcomed us within, and we sat before an open fire, prepared to enjoy ourselves. Several visitors played no small part in adding to the enjoyment of the evening.

Our president, Miss Travers, enthroned in a comfortable chair of state, opened the meeting, Miss Patton then discoursed sweet music on the piano. The debate "That the horse is more useful to humanity than the cow," followed. Miss Prather and Mr. Brunt spoke for the affirmative, Miss Shaw and Mr. Jacobson for the negative. Miss Richmond and Miss Doane were the judges, and decided in favour of the negative. A stirring war poem, breathing defiance to Germany, was then read by Mr. C. Ployart.

After the ordinary business of the meeting, refreshments prepared us for the great business games. In this department everybody shone. But the Christmas party was at last forced to break up, owing to the lateness of the hour. Before leaving, Miss Travers

MACDONALD LITERARY SOCIETY EXECUTIVE.

expressed the thanks of the society to Miss Robins for the evening's entertainment and presented her with a bouquet of sweet peas as a slight token of appreciation. College songs, Auld Lang Syne, and God Save the King were rendered with feeling and then we wended our way homeward, wishing all the while that such nights were not so few and far between.

### THE RINK.

Two weeks before the college closed for Christmas holidays, our hardworking rink-manager, Mr. Chester Lyster, called for volunteers to draw out the wood and materials for the rink. About fifteen husky, strong-armed boys came forward and with the help of one of the college teams got the boards out in record time. During the holidays the houses were put up and the foundation laid for the ice.

Since January 4th the rink has been under full swing. The rink manager returned a few days earlier in order things might be in good condition before the return of the students.

During the first week, when only the schools of Household Science and Agriculture were here, the rink was well attended, but since the teachers are back, the ice could be said to be crowded.

There are a number of improvements around and about the rink this year. The siding is now four boards high, which is a vast improvement over the old three-board fence. The lighting has been improved, by the addition of a dozen tungstens with reflectors. The houses are well built this year and verge on being comfortable.

Judging from the present state of affairs, no doubts as to the numbers of skaters need be entertained. Almost everyone, by working a little method into their work, can take the time for a good skate. To those who do not skate and who are timid about beginning, the old saying, "Never venture, never win," will be reassuring. Do not miss one of the best sports and most healthful exercises known.

J. G. C. F., '16.

Our Popular Rink Manager.

### THE LAST DAY.

To anyone who was ignorant of the date, the bustling and hurrying would have caused great bewilderment; but to anyone who knew that the calendar registered December the seventeenth, the confusion was no puzzle, for on the eighteenth the Christmas holidays began. All day long there had been

the ceaseless opening and shutting of the elevator door as the trunks were brought up from the basement. Then there was still more excitement in packing them. It was quite a familiar sight to see one dignified young lady sitting on a trunk which another, equally dignified, was trying her utmost to shut. After dinner there was a rush on the bursar's office for the trunk checks. There was something the matter with the clocks that afternoon; they only went at half their usual speed, but at last four o'clock came. Then there were good-byes to be said and mysterious parcels in white paper and red ribbon were exchanged. Anyone returning to the College that night found it a dreary and deserted place. It is needless to add that the same enthusiasm was not shown in unpacking the trunks as in packing them, because we were home, and trunks were nowhere then.

H. COWAN, T., '15.

### Y. M. C. A. NOTES.

The morning meetings continue to be well attended. We have been given several interesting talks by Montreal men on interesting questions of the day. Among the speakers were Dr. Thornton, of McGill, and Messrs. Common and Beatty, of McGill University, who gave a short talk explaining the object of Dr. Mott's visit to McGill. Prof. Billings, of Winnipeg, also addressed one of the meetings. Prof. Kneeland, before Christmas, gave a very interesting address on the life of Savonarola, the great Italian priest and patriot. Dr. Harrison, who addressed the first meeting after the term opened, gave the students a welcome back, and spoke on the conduct of men in private life; that they might well take for their guidance some of the objects of a soldier's life as laid down in the infantryman's handbook, such as cheeriness, ability to bear hardship and fatigue, and development of a spirit of comradeship with his fellows; and that they should endeavour to develop these qualities.

The "Sing Songs" in the Assembly Hall are as much enjoyed as ever. We have had two since the beginning of the term and several were held before Christmas. All these have been well attended, but we would like to point out that there are always seats "in front" for anyone who comes late, or for those who do not come at all because they think they may not get a seat. The front seats are meant for use; they are near the organ, and hymn books are always to be had here, while they are not always found further back; but for some reason the front seats are usually vacant, and, despite the entreaties of those taking charge of the meeting, these remain so. We repeat, the front seats are near the organ; and we would get more out of the singing if these were filled up; the singers and others who are so kind as to provide pleasure for us can be better heard and appreciated here; and we appeal to those who come (we know that nothing less than an appeal will have any effect), we appeal to those people who attend the "Sing Songs," to come to the front and to help out in making them a success.

A. R. M.

### THE SENIOR BANQUET.

Friday night was "fussing night." And why should the gym. door be barred by a senior teacher refusing to allow one fusser in the gym.? Any person chancing to peep in would have seen a long table decorated with ferns and flowers and with all the eats imaginable on it, for it was the great Senior Banquet of 1915.

About 10 o'clock Miss McGill and all the worthy seniors assembled together in the gym. to partake of the feast. It is needless to say how good everything tasted, for I am sure the seniors would all agree that it was due to Miss Tenny who managed the whole affair.

After all was over, Miss Harwood, our president, called on Miss Scott to give the toast to the King, which was responded to by Miss Travers. Miss Latimer was then called on to give a toast to the Faculty to which Miss Harris gladly responded. Miss Hyslop then gave the toast to the boys, which was answered by Miss Leet. Miss Robinson gave the toast to the freshies, which was very nicely answered by Miss Main, who was their representative. And lastly, Miss Harwood gave a very appropriate toast to Miss McGill, to which Miss McGill responded by thanking us all for our good wishes, and wished us a very successful year.

As we were nearly ready to leave a strange noise was heard at the door, and with a rush and bound a bunch of freshies, dressed as ghosts, came into the gym., walked around, gave a few yells, then went out. We all wonder why they came in.

When all was quiet again, we ended our banquet by singing our college songs, giving our senior yell, and singing "God Save the King."

When we returned to our rooms, some of us found our beds dumped, but what did we care when we all had such a pleasant time at the Senior Banquet of Class '15. M. T.

### SNOW-SHOE TRAMP GIVEN BY THE TEACHERS OF SECTION A.

Shortly after tea on Friday, February 5th, a wonderful array of colours could be seen flitting about the girls' building. The girls of section A, after a lot of trouble and excitement, were daring the powers of darkness by going on a tramp with their various boy friends. Many and varied were the honoured guests of the evening, but special honour is due to Mr. C. M. Ewart for planning the route of the tramp.

The joyful party started from The Building, from which came all manner of sounds, and wended its way with many tortuous curves up the west farm road; from here the fairies and their friends strayed to Mr. Morgan's foot-hills where the real tramp commenced. After the summit was reached the ringing sound of many voices could be heard in the M.A.C. yell. If only the future could have been foretold! Hills, hollows, fences and unseen drifts of snow were each in turn encountered and overcome, although many marks of the fray were still to be seen on the combatants when at last, weary, but still carrying a look of happiness, the party reached the girls' residence.

Preparations for an elegant lunch were already in order. Some of the fair ladies, having very real doubts about the enjoyment of a tramp, remained indoors (needless to mention not alone), for the purpose of guarding the delicacies from the ravenous wolves. After partaking of a varied and appetizing lunch the girls and the boys sang the college songs. Soon, much too soon, the sad moment of parting came, and after bidding Miss McGill and the girls good-night, we wandered over to our rooms still thinking of the wonders of the evening. THE MOON.

### SNOW-SHOE TRAMP OF THE SENIORS.

There are certain fundamental essentials necessary to insure an enjoyable, a successful and a satisfactory snow-shoe tramp. On Friday, the twenty-ninth of January, we had these essentials in

all their superlativeness. That night, Dame Fortune, out of the fulness of her heart, pronounced her blessing upon the Seniors. We had the snow; we had the partners—and *such* partners—we had the moon—the same old moon that has times without number seen snow-shoe tramps since snow and tramps were invented; we had the chaperones—and in this capacity Prof. and Mrs. Barton are without their peer; we had the tramp; and we had the felicity of being warmly received, entertained, and feasted by Miss Macmillan, in that room of historical associations—our leather room.

The fixing of the shoes provided an opportunity for doing obeisance to the descendants of the Grecian goddesses of old. The real or pretended snow-shoe inexperience of many of the fair ones provided an opportunity for gentle, studied and effective assistance on the part of the cavaliers. One can never be very sure in the pale, pale light of the moon, but the charming manner in which our one time "funny man" gave so many picturesque demonstrations of the stately minuet, cannot be easily forgotten. The partner of the worthy chairman of our Residence Committee accompanied him by proxy—a proxy supremely successful. Our president strove hard to assume the dignity which his exalted position demands; but methinks he was a cavalier first and then a president. The facetious embodiment of originality, who until lately presided over the destinies of the College Magazine, was there with bells—so were we all, to be sure. The fortunate one on whom his attentions were bestowed had copied the example of the rabbits in accommodating the colour of the coat to the colour of the snow. It was a merry party, and led by the versatile Professor we had a jolly tramp. Space does not permit of one referring to all the many little incidents which provide the necessary piquancy to any escapade; for the number of "headers" was too numerous to be mentioned, the fences were too high to be climbed, and the night was too cold to be slow. The inventor of the key-*hole*, through force of circumstances, had his tramp by a roaring log fire. I said the moon was bright. It fact it was full—absolutely full; yet, even so, we gladly availed ourselves of the services of our class Tungsten.

The tramp was over all too soon; and the shining moonlight gave place to the ruddy glow of an old time fire in an old time grate. We thawed, we talked, we played delightful little games, we ate, we drank, we talked again, we sang.

The end had come. We saw the writing on the wall.

W. S.

## *Time.*

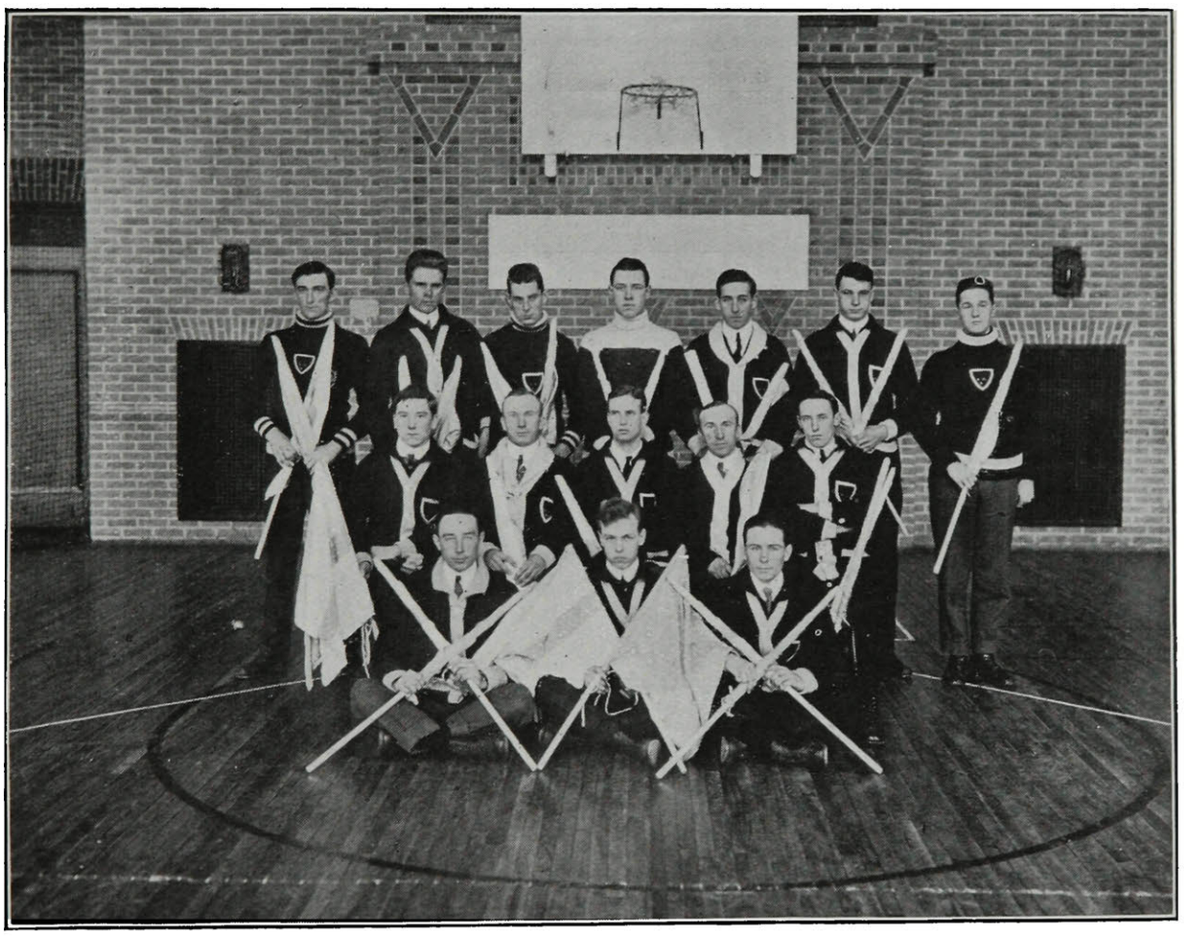
What time is it?
Time to do well.
Time to live better.
Give up that grudge,
Answer that letter,
Speak the kind word to sweeten a sorrow,
Do that kind deed you would leave till to-morrow.

—*East and West.*

# *Macdonald College on a War Footing.*

NOW that the world is resounding to the crack of the rifle and the boom of the big guns, it is interesting to know what M.A.C. has done, is doing, and hopes to do, in response to our Empire's call to arms.

On the outbreak of hostilities, many of our boys enlisted for active service. Messrs. R. Kennedy and W. Drehr, of Class '12; D. Lothian, D. McClintock and Critchley, of Class '13 ; D. Hamilton, R. Huestis, and C. Wilcox, of Class '14; B. Matthews, H. Baily and Turner,



* The Signalling Corps at Macdonald.

The University, as a whole, has responded nobly to the rally round the colours, and we, the Faculty of Agriculture, must necessarily be proud of our share in the glorious fight for liberty against the despotism of German rule. of Class '16 ; M. Signoret, of Class '17, were the first to bravely answer the call of duty and are now serving with the Canadian Expeditionary Force. We feel sure that they, as gentlemen and as Britishers, will prove a credit to their

* EDITOR'S NOTE.—We were not able to secure a suitable photograph of the whole student body while on drill. The above signalling corps has been very ably drilled by J. H. McCormick. Agr. '15, who has spent considerable time at such work.

country and to their Alma Mater. We wish them God-speed in their trials !

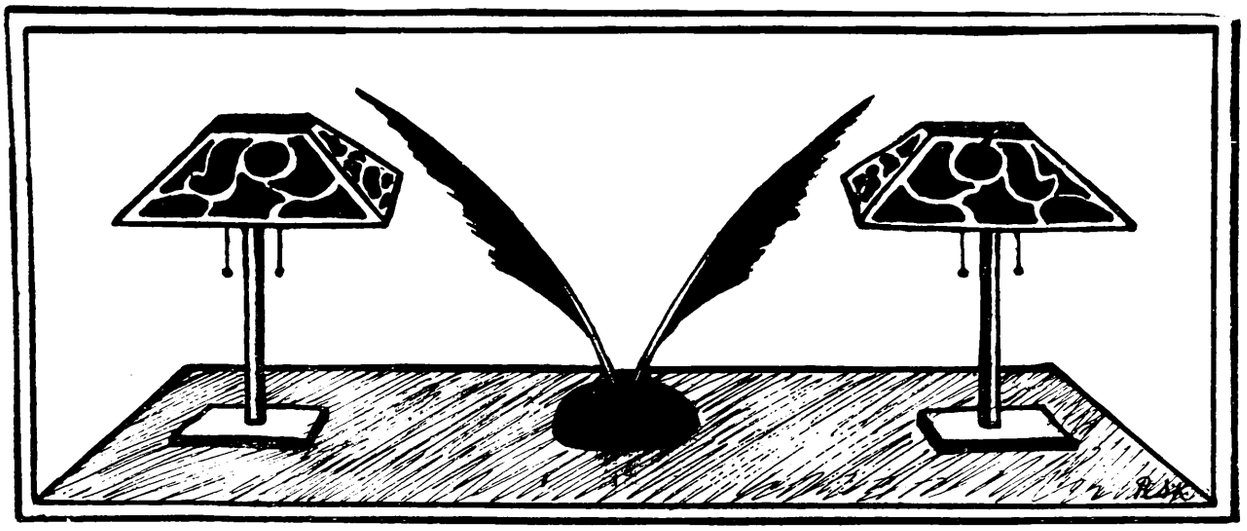
At the commencement of the session, an Officers' Training Corps was started at the College, which more than 90% of the students and most of the staff joined. Two platoons, under Dr. Harrison and Dean Laird, were formed, and in spite of many difficulties (lack of arms was the main one) we are rapidly being disciplined in the elements of military bearing. We have already taken a few lectures from Dr. Harrison on Strategy and Military Tactics, and are awaiting the remainder of these with the deepest interest.

A miniature range, with a suitable background, has been fitted up in the basement of the main building, and here we will be instructed in aiming, shooting, etc., at moving objects, as well as the usual black and white targets. A signalling class of about 16 fellows has also been started, and, judging from their present proficiency, they should prove efficient in flag signalling by the end of the session.

We are all doing our best to make the Corps efficient, and this without the glitter and glamour of ceremonial parades and newspaper articles. That each man should respond to his own innate sense of duty, without the added stimulus of "public opinion" and "grand stand play," is most commendable and must inevitably bring its own reward. Several men have already signified their intention of joining the colours at the end of the session, others are thinking of the probability, while all are willing to bear arms should the necessity arise : in such an event they will bring no disgrace to the Empire, the Dominion, or our Alma Mater.

J. H. McCormick, '15.

Where Sky and Water Meet.



# Under the Desk Lamp.

DR. JOHN R. MOTT.

THE name most upon the lips of all men students, at least, at Macdonald, during the last week of January was that of Dr. John R. Mott. Dr. Mott, who is a very prominent Christian worker (either being Secretary or Chairman of five great Christian organizations doing world work) was at McGill University from Jan. 28th to 31st, inclusive, and during that time addressed several meetings. Many of the students and members of the staff of Macdonald took advantage of this opportunity to hear Dr. Mott, and our college was well represented. Due to the generosity of an unknown Montreal gentleman more men were able to go in than would otherwise have been able to, this unknown gentleman providing railway tickets free to all those who wished to go in on Friday and Sunday evenings. Dr. Mott's talks were mainly for students, and in the course of his addresses he developed the dea that we are masters of our own wills, but that if we do not use our faculties they become atrophied; and similarly that if we do not study the Bible or live in Christ, we become unable to properly understand the former and get farther and farther away from the latter. He asserted that life in Christ is the only life which satisfies all our desires and fulfils our purpose here, and that no man can stand alone. He urged every student who never attempted to live the real Christian life, or anyone who had slipped away from the influence of Christ, to ally themselves to His cause and become as true followers of His as they would be soldiers of the British Empire on the battlefields of Europe, instead of being on the battlefield of life here in Canada.

Dr. Mott, who has just returned from Europe, where he was on the firing line in Belgium, France and Germany, gave his impressions on the war at one of his lectures.

We are sure that everyone who heard Dr. Mott carried away a lasting impression of him, and something in his mind to think about for some days to come.

THE GUELPH MEET.

This year we have been compelled to give up what has always been one of the strongest incentives towards excellence

in both sports and literary matters at Macdonald. We now refer to the intercollegiate meet between the Ontario Agricultural College, Guelph, and our own Alma Mater. For the past five years we have been fortunate enough to hold these meets at the two colleges alternately. This year the O.A.C. found themselves compelled to discontinue the one great bond between the two institutions.

The reasons given could scarcely be said to be satisfactory. That so important an event should be put off because the schedule of the athletic teams was already too full is hardly credible. The excuse that there was a stringency in the funds is almost as groundless, since the meet was to have been held at Guelph. The Literary Society contented itself by saying that since the Athletic Association had decided to discontinue the meet this year, it must follow suit.

We do not mean to blindly and recklessly charge our sister college with an attack of fear as to the results of the contest because a large amount of respect has been borne her from the results of former meets. Perhaps it is because we were so well prepared ourselves that our disappointment is so keen, yet we believe that no matter in what condition we had happened to be, such reasons would have appeared as excuses, not real reasons. Surely the executives of the different societies at Guelph cannot attach the same importance to the event as we have become imbued with, and we fail to see where we err.

For our part we sincerely hope that next year will see an intercollegiate meet; that the true sporting spirit which has so far prevailed will be strengthened; and that each college will bear to the other that respect which every true sportsman has for his fellow competitor.

## PROF. LAIRD'S SICKNESS.

We are very glad indeed to be able to announce through our columns that Prof. Sinclair Laird, who was taken very ill with typhoid shortly before the Christmas holidays, is now out of danger and is steadily recovering. He has been very much missed not only by those whom he had as students but by acquaintances and friends among the other students, and the news that he will be able, at his present rate of recovery, to be back at his post early in March, is welcome to all. We can but wish him a speedy and sure recovery, and, as friends, thank those who were able to fight back the fever so successfully.

During Prof. Laird's absence, Prof. Kneeland has acted as head of the School for Teachers. It is very fortunate that so experienced a one as Prof. Kneeland was available to act in this capacity.

## THE SHORT COURSES.

Just as we go to press the series of lectures in the Horticulture Short Course is beginning. These lectures last from February 8th to 12th inclusive, and during that time an astonishing number of facts will be imparted by our professors. A great many people are under the impression that nothing can be done in so short a time, but the steady increase in the ranks of those who come to take the short courses proves their view wrong.

This year the Short Course numbers upwards of forty. An interesting fact is that by far the greater number come from the city or city districts. We could not have much more conclusive proof that *the day* for agriculture is coming very near. It is to be regretted that the farmers in our communities do not avail themselves more of so grand an opportunity of receiving up-to-date knowledge

on a great variety of subjects. We, who have taken agriculture as our vocation would do well to apply ourselves with keenness to our work that we may honorably fill the positions we must later occupy as specialists in so vital a calling.

## EXCHANGES.

For this issue we have had to content ourselves with a very hasty perusal of the exchanges we have received since taking office. We appreciate the truth of the old saying, " People who live in glass houses should not throw stones," and reserve any adverse criticism we may have until we think we have gained our feet.

The number of exchanges received is not as great as we expected. It is not possible to even look through any of the magazines received in this way without having some new idea take the place of our own, and we therefore wish that the number was much larger.

The *Argosy* is to be commended on the amount of originality—the work of the students—found in its columns. It seems to be blessed with an abundance of student poetry. We wish that we were as fortunate.

We notice that the *University of Ottawa Review* has changed the design of its cover somewhat. A large number of student articles is seen in it also.

Other exchanges which we wish to acknowledge are *The Sheaf*, the *M. S. A.*, and *The Alumnus* of Iowa State College. Some interesting publications have been received from other sources. The *Agricultural War-Book*, published by the direction of the Hon. Martin Burrell, is extremely instructive and is in itself a mine of interesting facts. The *Journal of the Canadian Plant Society* and *The Labour Gazette* are well worthy of mention. Just before going to press a copy of the *King's College Record* has been received. We notice that the managing board of the *O. A. C. Review* has reduced the size of their publication. We can sympathize very sincerely with them and trust that the reduction will only be temporary.

In the "Land of the Maple."

George Wesley Cochran,

*Born Oct. 15th, 1892.* *Died Dec. 19th, 1914.*

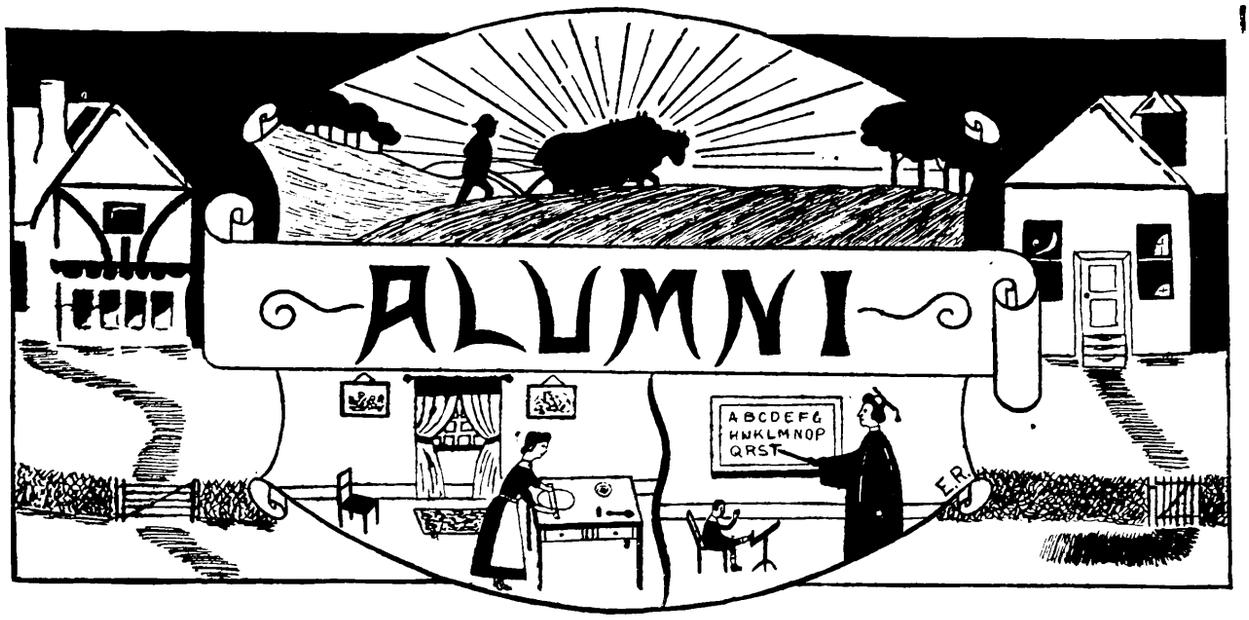
# In Memoriam

George Wesley Cochran (or Cochran, as he was known at college), was born and brought up in Upper Dorchester, N.B. He entered the Agricultural College at Truro, in 1911. At the beginning of his second term he was elected President of his year, in which capacity he acted with the same quietness and thoroughness that characterized him at Macdonald.

It was not until the latter part of the fall term that the opportunity of giving him an office came. He was appointed leader of one of the four Bible Study groups carried on under the direction of the Y.M.C.A., a position difficult to fill, but well filled.

In the first week of December, he was taken very ill with an abscess in his ear. Supplied with an unusual amount of determination, he remained on his feet until the poison, which escaped inwardly, forced him to his bed. From the college hospital he was taken to the city. There an operation was performed in the hope of saving him. The poison had, despite all efforts to combat it, obtained too strong a hold, and on Saturday, December 19th, he passed away. Only two days before he died he was elected editor of the Agronomy section of the College Magazine.

By his death, not only his own year, but the College as a whole, lost one of its most faithful students and one who appealed to and strengthened the best side of one's nature.




SCHOOL FOR TEACHERS.

Miss Mildred Wolfrey, Class '14, is teaching in the Lorne School, Montreal.

Miss Dorothy Percival, Class '14, is teaching in the King's School, Westmount.

Miss Etta Duncan, Elementary, Class '14, is teaching in Verdun, this year.

Miss Ruby Goff, Class '12, is now teaching in a school at Sawyerville, Que.

Miss Edith Dudgeon, Class '14, is teaching in Strathearn School, Montreal.

Miss Mabel Blampin, Elementary, Class '15, is teaching at Roxton Falls, Que.

Miss Joyce Raymond, graduate of Class '14, is staying at her home in Waterloo this year.

Miss Hilda Baker, Class '14, is teaching in the Roslyn School, Westmount.

Miss Celia Brooks, Class '15, is teaching in a school near Huntingdon, Que.

Miss Marion Smith, Class '13, is teaching at Standbury, Que.

Miss Marguerite Harrison, Class '14, is teaching in Mount Royal School, Montreal.

Miss Ada Evans, Class '11, is principal of the Birchton Model School, near Sherbrooke.

Miss Jessie Hamilton, graduate of Elementary, Class '14, is teaching in Rockfield School, near Montreal.

Miss Ruth Patton, Class '14, is teaching in the Roslyn School, Westmount.

Miss Evelyn Price, Elementary, Class '14, is teaching in a school in Birchton, Que.

Miss Hazel Robinson, Class '14, is teaching in Barnston, Que., this year.

Miss Isabel Le Messurier, Class '14, is teaching in Aberdeen School, Montreal.

Miss Bessie Radley, Class '14, is now teaching in Strathearn School, Montreal.

Miss Mabel Price, graduate of Class '14, is teaching in a school in Capelton, Que.

Miss Adele Bardorf, Class '14, is teaching in the Sarah Maxwell Memorial School, Montreal.

Miss T. Tannahill, Class '14, is teaching at Clyde's Corner, this year.

Miss Lily Hunter, Class '14, is teaching in Fertile Valley School, near Huntingdon.

Miss Ruth Runnells Pepin, Class '12, is at her home, Shefford Mountain, Que.

Miss Ethel Scott, Class '12, is teaching at her home, Savage's Mills, Que.

### SCHOOL OF HOUSEHOLD SCIENCE.

Miss Mabel Robb and Miss Doris Matthews, former short course students, are taking the Physical Education Course at McGill.

Miss Katherine Bastedo, Class '14, is conducting a community kitchen in Ottawa. Miss Lawson, among other Macdonald graduates, is assisting her.

Miss Florence Percival, Class '14, is assistant dietitian in the Vancouver General Hospital.

Miss Ella Murry, Class '14, is assistant dietitian in the Massachusetts General Hospital, Boston.

Miss Bessie Stuart, Class '10, has entered the Royal Victoria Hospital, Montreal, as nurse in training.

Miss Maybe and Miss Massey, of the Autumn Short Course, '13, are members of a corps of nurses of the first Canadian Contingent. They are now in a hospital in France.

Misses Henry, Scarff and Gardener, of Class '14, were week-end visitors recently.

Miss Winona Thompson, of Class '14, is taking a Playground Course at R.V.C., Montreal, and also teaching cooking down at the University Settlement.

Miss Enid Fee and Miss Dorothy Webster, Class '13, are doing settlement work in Montreal.

Miss Alberta MacFarlane, Class '14, is assistant supervisor of Women's Institute in Charlottetown, P.E.I. She is also assisting at lectures to short course students in Household Science.

### FACULTY OF AGRICULTURE.

M. C. Signoret, '17, when last heard of, was in good health at the firing line in North France.

J. K. Powell, '17, has enlisted in the U. S. Navy.

D. Oswald, '15, is at home at Vankleek Hill, Ont.

F. J. Grisdale is running the farm at his home, Point Fortune, Que.

Montgomery (" Montie ") is with the Canadian Contingent on Salisbury Plains.

' Doc ' Howard, '15, is at his home, Smith Falls, Que., and reports are that he is still the same old boy.

C. Edwards, '15, keeps a high-class herd of Jerseys at Coaticook, Que.

Smillie, of Class '13, is also with the first Canadian Contingent.

"Square Head" Halpenny, '15, is completing his agricultural education at Guelph.

Jean Masson, '15, is sec.-treas. of a steel manufacturing company at Quebec.

D. D. McDiarmaid, when last heard from, was still at work at the home place, Entwistle, Alta.

C. L. Smith was reported as having gone with the first contingent, but is still boss of the ranch at Red Deer, Alta.

C. E. Walker, class '15's war horse, is reported *farming* at home, South Byron, N.Y.

L. R. Jones, '16, is keeping up his Macdonald reputation for good work at Vineland Station, Ont., where he is working with Mr. Clement.

W. H. Elliott, '17, is running the farm at Tatehurst, Que.

Piddington, '17, is busied in England training recruits. We wish him all success in this good work.

M. P. Sharman, '16, is at home at Martinville, Que. Knowing him as we do, we can report a very hard year's work for him.

Miss Kitchener, '17, has been accepted at the General Hospital, Montreal, for a short course there, previous to going to the front as a nurse.

Class '16 congratulate C. R. Martin as being a very wise man. We extend to Mrs. Martin and to him our best wishes for a happy future.

George Carr, '15, is running a fruit farm in some part of Minnesota.

A. A. Allen, '15, is reported farming at Aubrey, and looking after the welfare of the ladies.

**In the Bliss of Childhood.**


THE term has come again, and the men, refreshed from their last strenuous work, have returned to take up the college activities, both mental and physical, full of renewed vigor and spirit.

A meeting of the former association was held on Wednesday, Jan. 6th, at which the following four new officers were elected:

| | |
|---|---|
| *President,* | A. E. Hyndman. |
| *Vice-President,* | H.C. Bailey. |
| *Secretary,* | W. D. Hay. |
| *Treasurer,* | W. E. Sutton. |

The rest of the Committee remains unchanged from last term. On behalf of the Association and Student body, we beg to tender our thanks to the retiring officers for their earnest efforts during the past year.

Everyone seems to have been stirred up with a feeling of unbounded enthusiasm, and thanks to Mr. Boulden's efforts, a Rooter's Club, of which he is the cheer leader, has been organized, and his cheery voice may have been heard at the last few games strongly leading the fellows in songs and yells.

We now take the opportunity of expressing the students' appreciation for the removal of the ventilators in the gymnasium walls by Dr. Harrison's kind help. Everyone participating in games of any sort in the gym. cannot but notice the great difference which their removal has caused in the feeling of security from accident.

The news that there would be no inter-collegiate at Guelph was the cause of many declarations of sorrow, since the trip and, more, the opportunity to come out best in the sports was looked forward to with eagerness. We are glad to be able to say that, without exception, the various games have been kept up and played with just as much zest as when the big event of the year could be looked forward to.

### BASEBALL.

On account of the war, all the regimental teams of the city with whom we could have arranged games have been broken up, consequently outside practice for our baseball players has been an impossibility. However, considerable spirit has been lent the game by the interclass series, and an agreement has been made with the Faculty to put on a series of five games; the team getting the highest aggregate of runs is given a supper at the other team's expense. So far only two games have been played. In the first, the Faculty succeeded in

winning by one run; in the second, which was played just before this goes to press, the student's team won by a score of 16-8. The remaining games are looked forward to with keen interest.

**BASKETBALL.**

Basket ball, as usual, has been very much in evidence since the term began, chiefly because of the fact, that our teams are in the Provincial Y. M. C. A., Junior and Intermediate League with city teams. Up to the present, however, our men have been extremely unfortunate, but we wish them all success in the future games. Below is a brief account of the games which have been played so far.

On Jan. 16th our first and second teams played the Intermediate and Junior North Branch at the North Branch Y.M.C.A. Both teams were defeated, unfortunately, due largely to their being unaccustomed to so small a gym. The scores were as follows:—

| | MACDONALD | NORTH BRANCH |
|---|---|---|
| First team | 18 | 52 |
| Second team | 26 | 29 |

On Jan. 20th, our first team again met with a defeat against McGill seconds in one of the most exciting games at the college this year. Our men showed good form on the whole, but were no match for the fine passing of the McGill men. During the first half of the game, McGill held by a fair number of points, but in the second half, our men played up and the score rose gradually on both sides, with McGill keeping just about 3 points ahead. Condition told towards the end, and the game finally fell to McGill with a total score of 42 to Macdonald 36.

In another series played on Jan. 23rd, between our Senior and Intermediate teams, at the Railroad Y.M.C.A., we were again defeated as follows:—

| | MACDONALD | RAILROAD |
|---|---|---|
| First | 25 | 48 |
| Second | 23 | 39 |

This was largely accounted for by the fact that our men were not quite in the best condition, largely due to the fact that there is no training table this year. On the other hand, our men were unaccustomed to playing in such a small gymnasium where not only was the atmosphere decidedly poor, but the home team, used to the prevailing poor conditions, resorted to every kind of play. Fouls were being called right and left on their men, and the games may have been likened to an imitation wrestling match at some stages during the play. The return matches, which are to be played in our gymnasium in the near future, are eagerly anticipated by everyone.

On Jan. 27th, after a severe struggle, which necessitated overtime play, Westmount Y.M.C.A. intermediate basketballers defeated our first team on the former's floor with a score of 47-45. When time was called the teams were on even terms, the score being 45 all. During the overtime period, Allan Davis, one of the Westmount forwards, scored the winning basket

The return match with Railroad Y.M.C.A. was looked forward to by our players, but not because of the sport exhibited by the visiting team. On Jan. 30th, the two games played by Railroad Intermediates and Juniors with our first and second teams were decidedly rough and unsportsmanlike. At times the play was actually repulsive to the onlookers; in justice to our players we must say that comments passed on the game showed the blame

placed on the visiting team. Such style in playing is to be severely condemned, since it not only spoils the game from a spectator's point of view, but defeats the very idea for which the game was originated—that of speed in thought and action and self-control. The score in both games was in favour of Railroad as follows:—

| RAILROAD | MACDONALD |
|---|---|
| Intermediates | Firsts. |
| 43 | 35 |
| Juniors. | Seconds. |
| 33 | 30 |

The line-up for Macdonald throughout the games was:—

| | | |
|---|---|---|
| Firsts | Forwards | R.—Aird. |
| | | L.—Hand. |
| | Centre | Evans. |
| | Guards | R.—L. C. Roy. |
| | | L.—Fraser. |
| Seconds | Forwards | R.—Skinner. |
| | | L.—Dunsmore. |
| | Centre | Moynan. |
| | Guards | R.—Biggar. |
| | | L.—G. Hay |

## HOCKEY.

It is an accepted fact that our hockey team this year is better than the College has seen for several years. This makes the cancelling of the Guelph meet somewhat galling to even more than the players. We must give the Freshmen their due and own that they have supplied more than half the players from their ranks. Despite the fact that we have so many new players, however, a great amount of the credit for the calibre of the team is due to the efforts of the captain, Hyndman, who not only showed the boys what to do but did it.

The first game played with an outside team, took place on Macdonald ice, on Jan. 16th. The Acorns, a Montreal team, met defeat at the hands of our players. The game could not be said to be fast, although at times there were some very good exhibitions of skating, and combination was shown on both sides. Right up to within a few minutes of the time, the score stood zero for all. At last Hyndman by a very pretty piece of headwork, succeeded in passing through the defence and scored the winning goal for Macdonald, by a well-timed shot. H. I. Evans, of Macdonald, acted as referee.

In an interesting game played at the Montreal "Arena," on Feb. 2nd, Macdonald was defeated by Victoria Juniors. The game was more closely contested than 5-0 would indicate. Lack of condition and lack of team-work were the main causes of the defeat. The Vics. had exellent combination, the forwards coming down the ice three abreast nearly every time. Both goal-keepers had to keep their eyes open. Hyndman, Skinner and Todd were the stars for Macdonald, and Jack Aird, Hooper and Jacques starred for Victorias.

A few more games with teams of the calibre of the Junior Vics would be greatly beneficial to the sporting spirit at Macdonald. The game was ably handled by Slater and Woods of Victoria Seniors.

The line up for Macdonald was:—

*Goal*—Todd.
*Point*—Wilson.
*Cover Point*—Hyndman (Capt.)
*Rover*—J. Buckland.
*C. Forward*—Aird.
*R. Forward*—Hand.
*L. Forward*—Skinner.

# Girls' Athletics.

## BASKET-BALL.

ACCORDING to the agreement made by the Women's Basket-ball League, the games this year have been played in neutral gymnasiums.

The first of the series was played at Macdonald College in the men's gymnasium between Victorias and Macdonald. This was a very close game and exceedingly good play was shown on both sides. However, Macdonald proved successful by winning with a score of 16-13.

On the same afternoon a game was played between Physical Education and R.V.C. Alumni. This was also an interesting game and ended in favour of Physical Education.

On Saturday, January 23rd, another game was played in Victoria School, Montreal, between Montreal teachers and Macdonald first team.

This was an exceedingly fast game. During the first half the score kept very close, and at half time it was 12-9 in favour of Macdonald. In the second half the play was still as close, but when the game ended Macdonald had increased her score to 31, while Teachers' was increased to 13.

On this same day also there was a game played in Edward VII School gymnasium between Victoria's and Macdonald's second teams.

The game was very closely contested, but Macdonald again proved successful, the game ending in her favour with a score of 19-12.

The results of the games played so far show that Macdonald and Physical Education must play to decide who will have the honour of winning the championship.

On Saturday, January 30th, the deciding and long looked for game between these two teams was played in Victoria School, Montreal. A great many fouls were made in the first half, which made the game rather slow, but the second half was much faster and both teams played a better game.

At the beginning of the first half we were unfortunate in losing Miss Binning, who, having injured her ankle, had to remain off the rest of the game; however, her place was ably filled by Miss Gutherie. Physical Education proved successful by winning with a score of 16-9.

Another game was also played this same day between Teachers and Macdonald's second teams.

This was an exceptionally good game, probably the most exciting that has been played this season. Both teams had good combination, and the score kept very close, especially in the second half when Macdonald was ahead at first and then Teachers pulled up and tied the score.

When there was just one minute to play, Teachers scored the winning basket.

Although neither of our teams won the championship, we consider ourselves very fortunate in securing second place for both.

When the games were over on Saturday, the teams presented Miss Roberts with a large bunch of roses in appreciation of her valuable work. Miss Roberts' interest in the teams has been evident at all times, and her useful suggestions and untiring efforts have encouraged us a great deal.

Much credit is due our two captains, Miss Hodge, of our first, and Miss Leach,

of our second team, who have shown such a great deal of enthusiasm in getting their teams out to practice, and giving the required instructions.

The Macdonald teams' line up was as follows:—

| *First* | | *Second* |
|---|---|---|
| A. Reid | Forward | M. Craven |
| G. Cornell | " | M. Rosevear |
| G. Armour | Centre | M. Gutherie |
| E. Binning | " | E. Hodge |
| P. Leet | Defence | A. Melon |
| J. Hodge (capt.) | " | B. Leach (capt.) |

Spares:—G. Buzzell
J. Richards
E. Stewart.

HOCKEY.

A meeting was held shortly after the holidays at which Miss Tenny was elected manager of hockey for this season.

Practices are being held twice a week and every one is very enthusiastic. Under the able coaching of Mr. Vanderleck, who so kindly consented to help us, we ought to produce a good team. We have already received a challenge from R.V.C., and a game will probably be played on Saturday, February 13th. Owing to their very small rink we will be required to play only five on a team. We hope also to have a return match out here, which ought to create considerable interest. G. M. C.

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## *The Red Cross Nurse.*

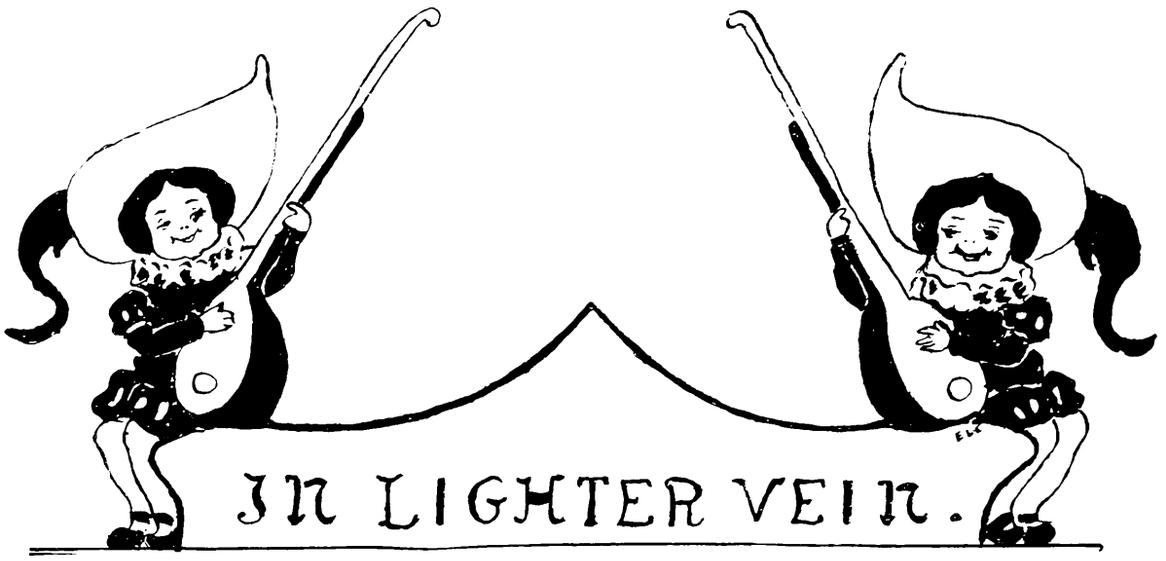
She goes amid the maddened press
Of Teuton, Briton, Slav and Gaul,
Our Nation's white ambassadress,
The foe of none, the friend of all.

Above the guns, above the cheers
For flag or kaiser, folk or king,
The common cry alone she hears—
The cry of human suffering.

Still men will play the devil's game
Though all must lose and none may win.
And still a foolish world's acclaim
Exalts the sworded paladin;

But tears will fall and lips will pray
And hearts beat warm in every land
For her who saves while heroes slay.
Oh, valiant soul! oh, gentle hand!

—*Arthur Guiterman, in Collier's Weekly.*




### SENIOR HOCKEY.

ANIMALS VS. GENERALS.

Did you miss it ? Dr. B. Bull, the lysol king, was there in all his armament. We refer to that ice farce staged one Saturday morning at the M.C. Ice Arena. Olif Yansen, the Swedish ice wizard, guarded the cage for the animals, and is reported as having made one stop, but insists that he was not to blame. Rosy Boyce was the one bright light of his side, but, of course, did not shine to the best advantage on account of guarding his fair skull with a tuque. Rooster Andy in no way disappointed his mates who were on the side lines in great numbers, gaudily feathered, and hugely amused. Elsie was a scream, and amused everybody by his speed and willingness to rough it. Willie Hodgins, the freshman, put up his usual consistent game, but Ikey Cohen, the Ottawa weak-end, was unusually quiet, due in all probability to his cold hands. For the generals Red-faced Sam, alias H. I. Evans, was most spectacular, skating rings around, and scoring at will against such clever players as have been mentioned above.

Their goal tender sprung a new one by chewing brown gum, which he claims steadied his nerves, and accounted for the classy exhibition which he put up. Mac, the woman hater, was not in his best form, due, supposedly, to the presence of women at the rink, but McOuat, the 110 lb. speedster, played a nervy game against such heavy weights as opposed him. We are sorry to add that King was responsible for the majority of local fights staged throughout the game, and if it were not for keeping his clean record unmarred, he would have been driven from the rink by the sympathizers of the Animals. But we are now to mention the real dark horse of the match—Mr. E. Groove White, who repeatedly brought the crowd to their feet by his blood-curdling rushes up the ice ; however, he lost many followers by his brutal body checking.

The disappointment of the game came when a general fight started, which ended in a fist to fist encounter, and abruptly closed probably the most classy exhibition of hockey ever staged at this College.

o o o

We would advise Dr. Savage to procure all the cats in the neighbourhood necessary for dissection work as they will probably be as scarce as hens' teeth when the Spendlove Pipers open engagements at the rink.

### THE MELTING POT.

The Human Grave Yard has resolved to crack a smile. The smile no doubt is coming, but so is Christmas.

o o o

The Junior Chemists have recently determined that "Fat" Lyster is an "ester" of C. H.

o o o

Small: "If you girls would come out and cheer for us we would play better hockey."

Miss C——: "Well, I haven't seen anything to cheer for yet."

o o o


What one does not know doesn't hurt them.

Prof. (calling the roll): "Hyndman."

G—— B——: "Hyndman is present. He just left the room."

o o o

McCormick, addressing student body: "All those ordering costumes for the masquerade from me will get a reduction."

Sadler: "Will this reduction be in price or in the size of costume?"

### AN UNUSUAL FACT.

Shaf.: "I believe there are bacteria in this dessert."

Miss K—n—er: "Why, certainly, there are bacteria in everything."

Shaf.: "But there are exceptions."

Miss K.: "For instance?"

Shaf.: "Pasteurized milk."

Miss K.: "Oh, well, they've all been taken out of that."

o o o

The Corn Fed Philosopher writes us that he thinks the familiar slogan "Votes for women" deserves a goose egg and finds evidence thereof to demonstrate that woman's place is in the home. He says that the word "Votes" is nothing more than "Stove" with the letters transposed, and the war cry should read—The Stove for women.

o o o

Fiske, in Chemistry exam.: "Are the questions of equal value, professor?"

Prof.: "The questions do not count. It's the answers that count."

Fiske: "Well, what do the answers count?"

Prof.: "Some of them will not count anything."

o o o

The instructor in physics was explaining the whiffletree as a lever of the first class.

"We have here, Mr. Ashby, a board of known length and we wish to put in a bolt-hole for the point of leverage. According to the rule of levers, where would you place the hole?"

Ashby: "In the board, sir."

o o o

Gib.: "Say, let me have ten, will you?"

Mack.: "Say, does the Bursar know you?"

Gib.: "No."

Mack.: "Then why don't you ask him?"

One of the old boys under nom-de-plume wrote us the following from his winter quarters:—

Dear Macs :—I reached Lake Massawippi 20 minutes ago and have just anchored at the beach. Just as I arrived the trees were leaving. Ed. Smith (he's the police force here) says to me, says he :—" You will pine away here." " What fir," I says, just like that, " I guess I'll be all right if I spruce up," I says. " That's a chestnut," he says, kind o' off hand like. We have hemlock, wedlock, and padlock here. You see great sights. Only just now I saw a man fishing and a man swimming in the same hole in the ice. I notice both railway rails run in the same direction. They have a peculiar custom here, whenever a woman passes every tree must bough; whenever we feel the need of juice for eggnog we tap an electric light wire. Ed. Smith tells me it is the custom to plant gardens in the middle of January. I says : " I suppose that if February doesn't March April May." I guess that was a new one on him. I think I am going to like him for a neighbour. The back door of the cellar where he keeps his vegetables is right near mine, and he always leaves the door unlocked.

DIPPY RAFTUS.

P.S.—If you happen to come down to the lake some day, drop in.

o o o

Mr. H.—— : " Who is your partner in chemistry, Mr. Sch——g ? "

Mr. Sch——g : " Howard, sir."

Mr. H—— : " Isn't Howard sick ? "

Mr. Sch——g : " Just for this afternoon, sir."

o o o

Freshman : " I think I will consult a phrenologist to read my head."

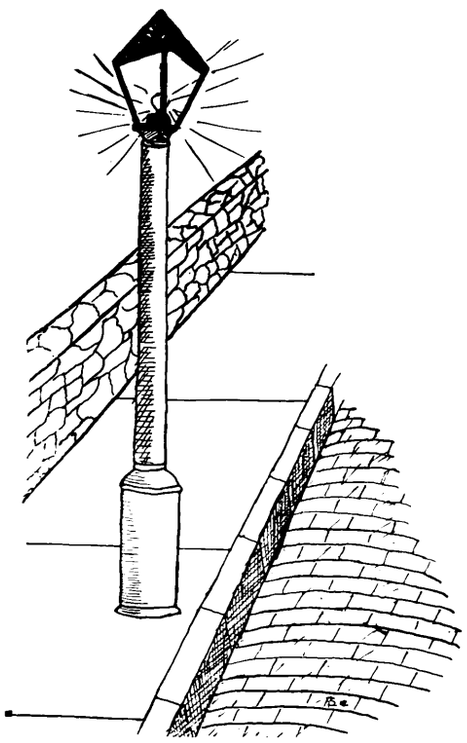
Soph. : " Oh, wait until you get bumps."

One of our Models in Lacolle was explaining to her pupils that surplus materials in a country were generally exported to other countries, and in order to see if she made her point clear asked :

" James, what do we do with the wheat that we do not use in Canada ? "

James : " Oh, we feed it to the pigs."

o o o



A prize of a year's subscription to this Magazine will be given for the best reasons why a College Demonstrator resembles one of the above lamp posts. Solutions to be forwarded to Joke Editor, who will publish the winning one in this column next issue. There are four reasons in the correct answer.

### THE LITERARY DIGESTERS.

McOuat writes stately sonnets,
Bill Bailey writes the sports,
While Lyster, of type beefonic,
Decants live-stock reports.
And that Bluenose, " Hungry " Boulden,
Scratches notes on Mother-Hen ;
And Chic writes apple culture
With an ever-flowing pen.
Pete writes in words of humour,
Dispersing cares that vex ;
But George Hay tops them all—for
He writes the greenback checks.

'Tis said by those of experience that howlers of the following nature are often the cause of more gray hairs to school " marms " than work.

1. The reason Samson was so strong was because he never let his wife cut his hair.

2. Mummies are people who are fermented after they are dead.

3. Esau sold Jacob his birth-mark for a plate of porridge.

4. I do not think " The Courtship of Miles Standish " is a probable story, for a man would rather hear a woman say " No" to *him* than to some other man.

5. Zacharias was a man who cooked insects in the temple.

6. A coureur du bois was a French Italian man who was noted for running.

o o o

Wilson : " I've decided to cast my lot with the colours. I'm going to enlist."

Miss C. M. : " Oh, but I think you're too young."

Wilson : " That's all right. I can go in the Infant—ry."

### THE LAST STRAW.

Dr. Harrison was in command of the Senior squad at target practice, and every member of the squad, with one exception, acquitted himself fairly well as a marksman.

The exception in question failed on the twenty-five yard shot, and when the Doctor tried him at the twenty yards, he again missed the target.

The fifteen yard range was tried, but the exception in question again failed to connect with the target.

The Doctor was at his wits' end, but in thundering tones commanded the recruit :

" Attenshun ! Fix bayonet, charge the target. It's the last chance you've got."

o o o

Prof : " In the years to come, the food problem will be solved according to scientists. We will have our food condensed into pills. For instance a pill would last one man a year."

Chorus : " Some pills for Biggar and Boulden."


ON THE WAY TO
DALESVILLE QUE.


# *Macdonald's Roll of Honour.*

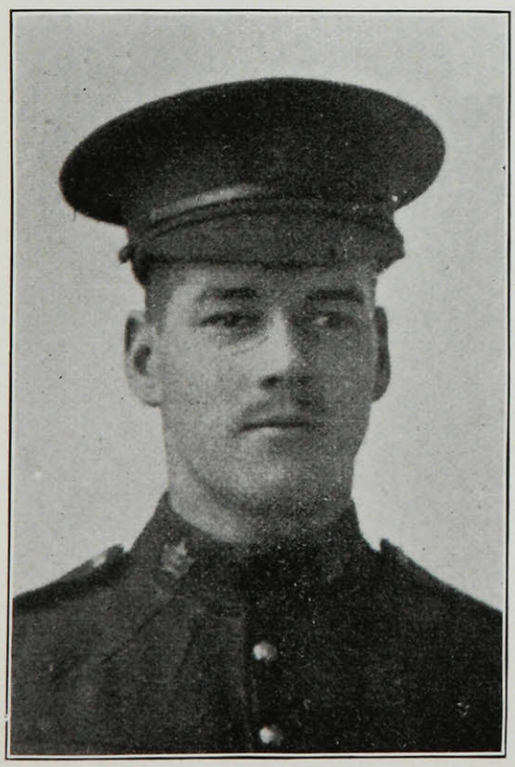
IN the fall number of the MAGAZINE we had the honour of inscribing on its pages the names of those who had volunteered for active service in the cause of the Empire. Many of those whose names were then given are now doing their part, as we knew they would, in the trenches in France, or in other capacities in keeping with their training and the necessities of war. Mathews, from whom we read a letter but a few days ago, was the third man of the First Canadian Contingent to enter the trenches and the firing line, and it behoves us to realize that Macdonald College now has its representatives in the actual theatre of war. Their Alma Mater is in their keeping, and we know that our honour is secure. Not long ago the Principal received a letter from Baily, in which a very vivid account of the life with a mighty army was detailed. MacClintock has also given us, in his usual racy style, an account of things in his own particular sphere, and these letters which have been duly posted on the notice boards are such as give pride to those of us who are as yet left behind. It is since Christmas, however, that we have in very truth felt the call of the blood, and the response has been in keeping with the urgency of the need. Within the last two or three months no less than 27 of the total men students in residence have enlisted for active service in one capacity or another. The fact that this represents twenty per cent of our men speaks volumes for the wave of patriotism which is sweeping over the Dominions of the Empire, in keeping with the spirit of the Motherland herself. The men who have lately donned the uniform of the King, like those who went before, have not rushed in with careless mien and jaunty air ; they have deliberately sunk their academic aspirations and their social proclivi-

MACDONALD MEN WHO HAVE ENLISTED WITH McGILL BATTALION.

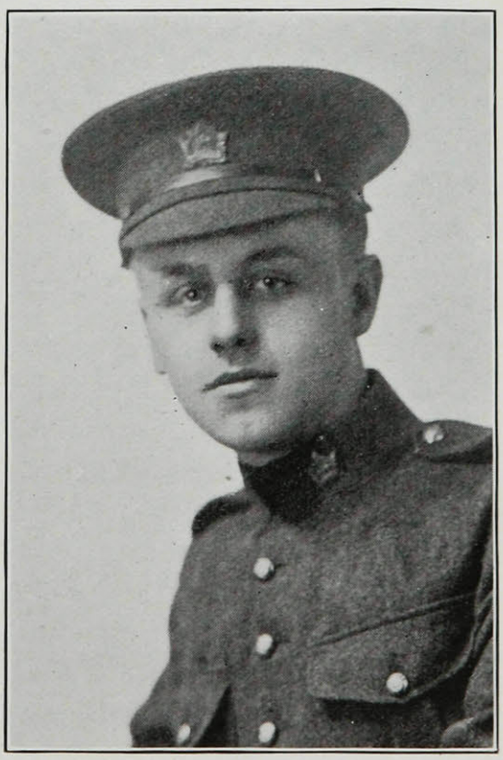
Back Row—A. R. Milne, W. Buckland, J. H. McCormick, E. A. McMahon, C. E. Boulden.
Second Row—R. R. Flood, J. R. Spendlove, N. C. MacFarlane, H. R. Bailey.
Front Row—A. R. Jones, W.J. Patterson, C. Bradford, P. Ashby, J. W. Brunt

B. WALSH, 5th Mounted Rifles.

MACDONALD MEN IN THE McGILL MEDICAL CORPS.
Standing—R. E. McKechnie, H. I. Evans, G. F. Collingwood
Sitting—J. G. Lefebvre, C. F. Peterson, H. D. Mitchell, H. F. Williamson



J. G. RICHARDSON,
24th Victoria Rifles.



E. VIANNE,
24th Victoria Rifles.

ties, and they have offered on the altar of duty that which is dearer than all but honour—life itself. We are justly proud of the fact that such a splendid percentage of our men have joined the Army, but we are still prouder of the fact that they are men of such calibre and such worth. As students of the College they do us credit academically, morally, and physically, while as "Soldiers of the King" the motto of their Alma Mater, "Mastery for Service," in unison with their sense of duty and their legitimate pride of race, will lead them on to glory and to fame. To doubt it would be to doubt the shining of the sun. We cannot but keenly feel their temporary loss from our midst, but the qualities, which as friends and fellow students have endeared them to us, are the very qualities which will enhance the strength of whatever company it is their fortune to form an integral part. Almost to a man they have made their mark in College life in one way or another, and some of them have constituted a record by which the annals of the student historian of the future will be illuminated. Among their number are McKechnie (Mac), who, as President of the Y.M.C.A., has worthily upheld with eclat the traditions of his predecessors; Mitchell, who, as late advertising manager for the MAGAZINE, could extract money from the sources which ordinarily might have been considered impregnable ; Evans ('Arry), the hope of his class as a baseball pitcher and the ex-President of the College Athletic Association ; McCormick, who has led his class without a break ; Williamson, the musician and Chairman of the Bible Study Committee, all of Class '15 and hence in their final year. Among the Juniors are Collingwood, "the student," who led his class at Christmas; Kelsall, who came second and as a pianist has been one of our acquisitions ; Peterson, the humorist for the MAGAZINE and incidentally a "dry-stick" ; Boulden, the conductor of the College Yells ; and McMahon, who on occasion made a perfect usher.

The Sophomores are represented by Milne, their President, who is a host in himself as Secretary of the Y.M.C.A., Prize Essayist of the Canadian Manufacturers Assn., and Assistant Editor of the MAGAZINE ; Bailey (H. C.) the winner in his Freshman year of the College Individual Championship for Sports ; Bradford, a runner and an artist on sports day with the 'pole'; Jones, a runner-up in academic work ; Spendlove, famed as the originator of the College Bum Band; and Vianne, whose student activities would ensure his success as a commandeerer of supplies.

The Freshmen have not been with us sufficiently long for us to know their peculiar adaptabilities to such an extent as would warrant us being explicit, but they are worthy comrades of those with whom they share the honour of being Macdonald boys. Ashby is unique as an unconscious wit, and good humour is bound to prevail in the environment of 'Pat' ; Walsh, the peculiar shade of whose hair has earned the encomium of 'brick,' was on the Committee of the Y.M.C.A. ; Wilson as a hockey player was one of the stalwarts of his team ; Flood has supplied a very great deal of enthusiasm incidental to the forming of the McGill University Section ; while Roy (Spike), Richardson (Dooley), Buckland, Lefebvre, and Paterson have each the makings of a man. Brunt, of the School for Teachers, took an active part in the literary work of his class. Two of the staff, Mr. MacFarlane, of the Chemical Department, and Mr. Hislop, cashier in the Bursar's office, have vacated remunerative positions to serve their King in uniform.

A little while ago Captain Barclay, in command of the McGill Overseas Company, which is attached to the 38th Ottawa, expressed a desire that a section should be drawn from Macdonald. No less than seventeen of our men responded, and they are now at the time of writing in barracks in Montreal.

Many have enlisted in the McGill Base Hospital, which is destined for service in the immediate future ; while they are drilling regularly in town, they are as yet in residence with us pending their removal to barracks. Two are in the 24th Victoria Rifles, two in the Canadian 5th Mounted at Sherbrooke, and one in the 6th Mounted Rifles at Halifax.

We honour our boys who for the time being have discarded the pen, the test-tube, and the lecture-room to don the khaki of the King, and we shall await with confidence their return from the field of fortune, of honour, and of glory. Their sacrifices have been great; great will be their reward. We clasp their hands in friendship, we wave them 'Au Revoir,' we wish them God-speed, and, in the words of the immortal bard, cry : "God for Harry ! England ! and Saint George !"

NOTE.—Since the above article went to press, H. W. Brighton, President of Class '18, has also joined the colours.

A Section of the Officers'Training Corps at Target Practice.

# *Stonehenge.*

HERE in Canada since August, and more particularly since Canada sent her first contribution of men to join the army of the Mother Country, much has been heard from time to time of Salisbury Plain.

Not a few men from Macdonald will be seeing this place for themselves, and to them some information concerning it may prove of interest.

This shows the huge hand-laid Monoliths.

Soon after arriving in camp it should not be difficult to pay a visit to celebrated Stonehenge, the handiwork of the Druids of ancient history. These venerable stones are in the centre of the district devoted to military camps and manoeuvres.

To anyone familiar with the county of Wiltshire it takes but a moment to be back there once more, in spirit. In a moment one is on that road so often travelled before, the main road from London to the West of England; behind in the distance is the spire of Salisbury cathedral. At this point you turn to the right, and go North for seven or eight miles, and so reach Salisbury Plain.

While you travel over the undulating country and ascend the round-topped hills, broad sweeping valleys come into view, where dotted here and there are to be seen flocks of sheep grazing on the short green grass, or, looking in another direction, hill and valley are covered with various crops, presenting one of Nature's own-colour schemes of regular pattern and varied hue. Here on the plain some of the farms are often several thousand acres in extent and the buildings are consequently widely scattered. In the country districts of England at every cross-road is a white-painted sign-post giving the distances from the nearest village, and to the most important town. Reaching one such sign-post you read that Stonehenge is two miles

along the road. The country passed through is grass covered with a few clumps of brushes at intervals. The next object to attract attention is a small granite monument close to the roadside. On drawing near, one learns that it has been but recently erected. The simple inscription tells that at this spot—a few miles from the Army Flying School—two officers, pioneers of aviation, fell to earth.

At least three hundred yards ahead and to the right of the road appear a number of tall grey stones, standing out sharply from the green grass,—the circle of stones erected by the Druids of old, more than three thousand years ago. Here in this very place they made human sacrifice, and performed their acts of worship to the sun. Within this circle of stones some 1600 years later, it is said, the great Roman Constantine was buried. You may approach and enter within the circle, and observe how some of the monoliths stand some twenty feet and more out of the ground. The composition of the stones is particularly interesting—they are Sarsen—a grey sandstone, and yet they are to be found in the middle of Salisbury Plain, which is one huge deposit of chalk, miles in extent and hundreds of feet deep. The stones then must obviously have been conveyed by some means to their present position, and it is believed that they were deposited here and there by glacial action and later assembled, shaped, and erected by the Druids. They are in circles, the outermost circle being composed of stones on end placed at regular intervals; resting on the top of these, and connecting them, are stones arranged horizontally. Some forty yards outside the circle is a tall stone called the Friar's Heel; this stone is in such a position, that when the sun rises over the distant hillside on the morning of the longest day, a shadow is thrown by the Friar's Heel on to the sacrificial stone. This arrangement of a Friar's Heel is common to other Druid temples.

It was a stupendous task these men undertook, carving with the most primitive tools, assembling and erecting the immense monoliths, some thirty tons each in weight, just by their own bodily strength and their beasts of burden. It is a monument to endurance and perseverance unsurpassed by modern engineers, who can bring to bear highly developed engines of mechanical advantage.

It is a coincidence also that these Druids held a view resembling to a degree the modern sentiment regarding the sacrifice of human life—that there are other things more important than life itself.

A few yards away on the other side of the road to Stonehenge, are a number of regular shaped mounds, the "barrows" of the Romans. It was here that they buried their dead warriors, some eight together, after battle.

Beyond these "barrows" a mile or so over the plain, is a wire boundary guarded by a mounted sentry. Some distance within this boundary are the sheds where the Army flying machines are kept.

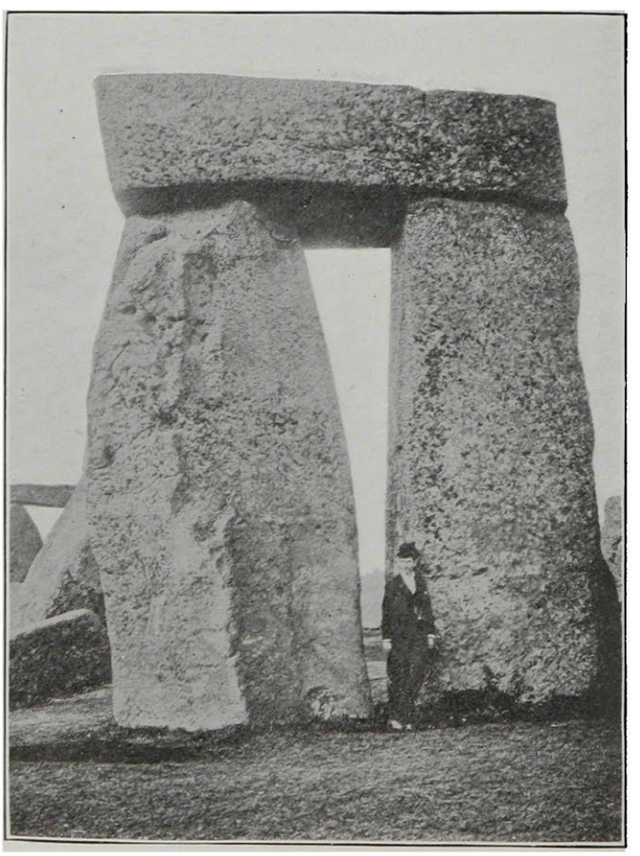
Brief mention can only be made of some of the military spectacles to be witnessed on Salisbury Plain—the charge past of three cavalry regiments can only be witnessed here on the training ground, and in actual warfare; the galloping past of the artillery to the jingle of the chains; the dull booming of the heavy field guns; the mass of white tents of the camps; the passing of supply waggons; the tramping past of

infantry and other manoeuvres, with now and again the drone of flying machines.

In the midst of all this our mind dwells on the many treasures scattered here and there over the Mother Country. In the county of Wiltshire alone there are numerous places where history has been in the making. It was here that Alfred the Great met with defeat and finally became victorious over the Danish invaders. A few miles away is the site of the old Saxon Parliament. The New Forest made by William the Norman lies on the boundary, likewise a battlefield of Cromwell. There are old castles that take us back to the days of heraldry. Then, too, the stately residences surrounded by their picturesque grounds where natural beauties of landscape are preserved. The home of the Nelsons is such a one—Trafalgar House.

The churches also, that testify to the Faith of our forefathers of a thousand years ago down to the present; the old coach roads and village inns, the village markets and the country folk, the farmers, the labourers, the waggoners, the rumbling waggons, the smithy and the bonny village youngsters. In fine, our mind fondly dwells on the dear good old England that has been so for centuries.

GEORGE FENOULHET, Agr., '16.



Sunrise at Stonehenge on the longest day of the year.

# *Huntingdon County.*

DURING the glacier period, when most of the province south of the St. Lawrence was entirely carpeted with water, snow and ice, the county of Huntingdon received its coatings of rich soil. The ravages of time have not swept all the noted markings away, for running along the southern boundary of the county one finds ridges and terraces which the limits. Huntingdon is situated at the head of the noted Chateauguay Valley, and at present ably does its part in keeping up its reputation.

Canada, the land of the maple, is the home of the happiest people on earth. Proud should be the farmers who have their homes surrounded by the maple, a tree that not only affords beauty and shade, but sends forth its sap to feed thousands of human beings. Situated

A scene especially pleasing on a hot summer day. Nor is it the only one of its type in Huntingdon County.

water washed up along the foothills. However, what the county is and what its agricultural standing in the Province is, concerns us at present. Huntingdon is the most southern county in the Province having for its southern boundary the State of New York; for its west and north west, Lake St. Francis; the county of St. Johns forms the eastern, and the counties of Chateauguay, Beauharnois and Napierville the northeastern as we are, just below the foothills of the Adirondacks, one finds along the boundary rolling land covered with maple woods, made beautiful by ravines and small rivers rushing down from the mountains. On coming further north one finds large stretches of level, heavy land, rich in plant food and admirably suited for crop production. Various types of soils allow for different kinds of farming. Thus, we have orcharding

practised to a certain extent, much to our detriment, in a very primitive manner, coupled with lands wonderfully adapted for sheep grazing. Dairying is by far the most prominent and successful phase of farming practised, and it might be added that the county need at no time be ashamed of its dairy herds, Ayrshires and Holsteins each having their admirers, and rightly so.

About seven miles from the United States we find the county seat, Huntingdon, a town mainly made up of retired farmers and lacking slightly as an industrial centre. Both the N.Y.C. and G.T. railways pass through the town on their way to and from Montreal. This affords ready and unlimited access to the city. The Borden Milk Company operates a large concern, shipping large quantities of milk to Montreal, besides all the other milk by-products manufactured. Huntingdon presents the cleanest and most prosperous appearance one could desire. The county holds two annual fall exhibitions. Division A of the society exhibits at Huntingdon, and is the strongest. Here high grade stock represents the prominent breeds. The horticultural building and conservatory attract the eyes of all sightseers. The children's school fair in connection with Macdonald College is one of the great centres of attraction.

Division B of the society holds its annual exhibition at Havelock. Hardly so strong in live stock, but excelling Division A in the exhibition of apples and small fruits.

At present Macdonald College is represented in the county by Mr. R. E. Husk. There is a general feeling that the people are reserved in manner and the people of Huntingdon county do not fully appreciate the efforts of a district representative. I would state that although the people are reserved in manner and do not take up with new ideas quickly, they stand by and with resolved and united efforts see through what they believe to be progressive. Mr. Husk has only been at his work for about one year. Last fall he held an excellent school fair; at present he is training a judging team for a county competition to be held at Ormstown. Teaching agriculture in many of the schools has taken up much of his time. As soon as spring opens Mr. Husk is going to do his utmost to promote the sheep industry. He intends to make himself personally acquainted with every sheep-raiser, and through untiring effort persuade these people to form a wool association, and to start as many new flocks as possible. At present there are all told 3,000 sheep in Huntingdon. There is no reason why this number could not be doubled or even trebled.

Orcharding receives much attention from the professors of horticulture at Macdonald. They have one or more demonstration orchards around Franklin, and all through the spring and summer various spraying and thinning lectures are given, in order that theory may be followed up by practice. May we hope that in the near future there will be great changes both in production of fruit and in the care of the orchards.

Within the next two years the county hopes to have its roads macadamized. Last summer there were six or seven crushers working. Good roads make the county more attractive, and tend to raise the social standard of the different communities.

Coupled with the good roads is the very wide distribution of the Rural Telephone and the Rural Mail Delivery, both of which are indications of success and prosperity.

The poultry industry has received considerable attention from Macdonald. The village of Hemmingford is the headquarters of an egg-circle; which, due to many causes, is not doing justice to itself or its founders. Co-operation is a great thing and aids the farmer in overcoming many difficulties. No district need fall down in co-operation if they elect live men who will diligently look after the interests of the society, and work for the society and not for themselves. One of the four demonstration poultry houses in the Province is to be found in the county.

As a county Huntingdon has much to be proud of, and much that time and opportunity, combined with progressiveness, can improve. In closing may I suggest that every branch of farming practised be given due thought and that all concerned work for the good of the county and the great Science of Agriculture.

G. C. BOYCE, Agr., '15.

Barn of Mr. Arthur White, built by his father, Mr. Thomas White.